For the Future of High Quality Development

The 17th China-Korea Quality Symposium

Conference Program

August 10-12, 2018

Zhejiang Gongshang University, Hangzhou
Overview of ZJSU

Zhejiang Gongshang University (ZJSU) is located in Hangzhou, the capital city of Zhejiang Province, China. Seven hundred years ago, Hangzhou, as the biggest city in the world, was applauded by Marco Polo, the well-known Italian traveler, as "the most splendid and luxurious city in the world" , while in the 21st century, Hangzhou has won the UN-Habitat Scroll of Honor Award, and is honored as one of the two best tourist attractions in China.

ZJSU, as the earliest business school in Modern China, has become a comprehensive university covering nine academic areas of social and natural sciences, including Management, Economics, Engineering, Literature, Arts, Law, Science, History and Philosophy, and has a good reputation in teaching and research, especially in business, administration, law, food sciences and other social sciences.

As ZJSU is entering its second century, our goal is to become an internationalized university with internationalized administration, internationalized faculty and internationalized students. We are working together for a determined mission: "To straighten up ideas, to speed up development, to prosper through innovation, to distinguish by features." As one of the top universities in Zhejiang, ZJSU is marching forward diligently to be a leading university in China, especially in social sciences.

ZJSU attaches great importance to international cooperation in the areas of teaching and research. It has had student exchange, joint research and a variety of cooperative programs with over eighty universities of more than twenty countries, such as the USA, the UK, Germany, France, Canada, Australia, New Zealand, Japan, Korea. Over one thousand international students are studying Chinese Language, Chinese Culture, degree programs and other academic subjects on our campuses.
For the Future of High Quality Development

The 17th China-Korea Quality Symposium

August 10-12, 2018

Zhejiang Gongshang University, Hangzhou

Sponsors: National Natural Science Foundation of China
          National Research Foundation of Korea

主办方：中国国家自然科学基金委员会
          韩国国家研究基金会

Organizer: Zhejiang Gongshang University

承办：浙江工商大学
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Symposium Committees 会议组委会

Chair 主席:
Prof. Jichao Xu  Vice Director of The People’s Congress of Henan Province

Co-Chairs 副主席:
Prof. YounSung Kim  Inha University  President of KSQM
Prof. Zhen He  Tianjin University
Prof. Jiafu Tang  Dongbei University of Finance and Economics
Prof. Haiyan Wang  Zhejiang Gongshang University

Program Committee 程序委员会:
Prof. Haiyan Wang  Zhejiang Gongshang University
Prof. YongHwi Noh  Myongji University
Prof. Haiyu Wang  Zhongyuan University of Technology

Organizing Committee 组织委员会:
Prof. Yizhi Ding  Zhejiang Gongshang University
Prof. Liang Xiao  Zhejiang Gongshang University
Prof. Peihua Fu  Zhejiang Gongshang University
Mrs. Ying Tang  Zhejiang Gongshang University
Mr. Daqiang Chen  Zhejiang Gongshang University
Mr. Chao Zuo  Zhejiang Gongshang University
Mrs. Jinru Zhou  Zhejiang Gongshang University
### Symposium Program 会议日程安排

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<tr>
<td><strong>Friday 10th August 2018</strong> 2018年 8 月 10 日 星期五</td>
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<tr>
<td>12:00-21:00</td>
<td>Arrival &amp; Registration at the lobby of HangZhou Hai Hua ManLong Resort 报到注册  (杭州海华满陇度假酒店大厅)</td>
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<tr>
<td>17:30-20:30</td>
<td>Dinner (Buffet) 2nd Floor of HangZhou Hai Hua ManLong Resort 自助晚餐  (杭州海华满陇度假酒店二楼)</td>
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<tr>
<td><strong>Saturday 11th August 2018</strong> 2018年 8 月 11 日 星期六</td>
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<tr>
<td>08:30-09:10</td>
<td>Opening Ceremony at Haihua Hall, 2nd Floor of HangZhou Hai Hua ManLong Resort 开幕式  (杭州海华满陇度假酒店二楼 海华厅)</td>
</tr>
<tr>
<td>09:20-09:35</td>
<td>Group Photo Taking 集体照相  (杭州海华满陇度假酒店)</td>
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<tr>
<td>09:35-09:50</td>
<td>Tea Break 茶歇</td>
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<tr>
<td>09:50-11:50</td>
<td>Keynote Speeches at Haihua Hall 大会报告  (海华厅)</td>
</tr>
<tr>
<td>09:50-10:30</td>
<td>Quality and Reliability from a Systems Engineering Perspective  (Prof. Min Xie)</td>
</tr>
<tr>
<td>10:30-11:10</td>
<td>Climate Change, Low-carbon Policies, and Business Strategies  (Prof. Su-Yol Lee)</td>
</tr>
<tr>
<td>11:10-11:50</td>
<td>Food Quality and Safety, Spectrum Data Analysis, and Decision Support  (Prof. Haiyan Wang)</td>
</tr>
<tr>
<td>12:00-13:20</td>
<td>Lunch (Buffet) 2nd Floor of HangZhou Hai Hua ManLong Resort 自助午餐  (杭州海华满陇度假酒店二楼)</td>
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The 17th China-Korea Quality Symposium

Symposium Program  会议日程安排

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<th>Time</th>
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<td>13:30-15:30</td>
<td>Parallel Sessions at HangZhou Hai Hua ManLong Resort  分组报告</td>
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<td>(杭州海华满陇度假酒店各报告厅)</td>
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<tr>
<td></td>
<td>A1 (8 Papers)</td>
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<td>A2 (8 Papers)</td>
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<td>A3 (8 Papers)</td>
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<td></td>
<td>Service Quality Management</td>
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<td></td>
<td>(Venue: Jinman A Hall)</td>
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<td></td>
<td>Quality Innovation and Design</td>
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<td>(Venue: Liuxia Hall)</td>
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<td>Quality Data Modeling</td>
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<td>(Venue: Yinxiu Hall)</td>
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<tr>
<td>15:30-15:50</td>
<td>Tea Break</td>
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<tr>
<td>15:50-18:20</td>
<td>Parallel Sessions at HangZhou Hai Hua ManLong Resort  分组报告</td>
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<td>(杭州海华满陇度假酒店各报告厅)</td>
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<td>B1 (9 Papers)</td>
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<td>B2 (8 Papers)</td>
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<td>Process Management and Control</td>
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<td>(Venue: Jinman A Hall)</td>
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<td>Quality Design and Analysis</td>
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<td>(Venue: Liuxia Hall)</td>
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<td>B3 (9 Papers)</td>
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<td>B4 (8 Papers)</td>
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<td></td>
<td>General Quality Management</td>
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<td>(Venue: Yinxiu Hall)</td>
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<td>Quality and Safety Management Management</td>
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<td>of Agricultural Products</td>
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<td></td>
<td>(Venue: Jinman B Hall)</td>
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<tr>
<td>18:40-21:00</td>
<td>Banquet at Haihua Hall, 2nd Floor of HangZhou Hai Hua ManLong Resort</td>
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<td>晚宴</td>
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<td></td>
<td>(杭州海华满陇度假酒店二楼 海华厅)</td>
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<tr>
<td>Sunday 12th August 2018</td>
<td>2018 年 8 月 12 日 星期日</td>
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<tr>
<td>08:15-08:30</td>
<td>Gather at the lobby of HangZhou Hai Hua ManLong Resort</td>
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<td></td>
<td>在杭州海华满陇度假酒店大厅集合</td>
</tr>
<tr>
<td>08:30-17:00</td>
<td>Site Visits</td>
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<tr>
<td></td>
<td>Quality and Safety Process Management of Agricultural Products</td>
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<tr>
<td></td>
<td>农产品质量安全过程管理现场考察</td>
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</tbody>
</table>
Keynote Speech 主题报告

Keynote Speech 1

Prof. Min Xie received his PhD in Quality Technology from Linkoping University, Sweden in 1987. He did his undergraduate study and received MSc from Royal Inst of Technology in Sweden in 1984. Prior to that, he was a student for a year at Univ of Science and Technology of China, after receiving the highest score in a nation-wide examination to the gifted program in 1978. Prof. Xie joined the National Univ of Singapore in 1991 and in May 2011, he moved to City Univ of Hong Kong as Chair Professor of industrial engineering. Prof. Xie has published about 300 SCI journal papers and 8 books, including “Advanced QFD Applications” by ASQ Press, “Weibull Models” by Wiley, “Statistical Models and Control Charts for High Quality Processes” by Kluwer, “Stochastic Aging and Dependence for Reliability” by Springer. Over 50 PhD students have graduated under his supervision. Prof. Xie is an editor, associate editor and on the editorial board of many established international journals. Prof. Xie was elected Fellow of IEEE in 2005.

Speech Title

Quality and Reliability from a Systems Engineering Perspective

Abstract

Quality has many dimensions and reliability is the most important quantitative measure of product quality for complex system. Systems level analysis has become more and more difficult because of the rapid development of modern technology and increased complexity of the systems. Many systems are also safety-critical in nature or have a significant impact in our daily life. In this talk we will discuss some of the challenging issues in quality and reliability analysis of complex systems. The lack of time for system testing and the dependence of various components in the system are examples of issues that should be dealt with. System maintenance with various warranty policies are some other issues related to system level decisions. Some possible approaches to address these issues will also be presented.
Keynote Speech 2

Su-Yol Lee is a Professor at College of Business Administration, Chonnam National University, South Korea. He earned his doctorate of management engineering from Korea Advanced Institute of Science and Technology (KAIST). Prior to join the current faculty, he worked as a post-doctoral researcher at Ivey Business School of Western University, Canada. His research interests include business sustainability, corporate social responsibility, strategic environmental management, climate change and business, and sustainable supply chain management. His research work appeared in several international journals, including Journal of Supply Chain Management, Production and Operations Management, International Journal of Production Economics, Business Strategy and the Environment, Total Quality Management and Business Excellence, and Corporate Social Responsibility and Environmental Management. He is serving as Editor-in-Chief of Korean Production and Operations Management Journal.

Speech Title

Climate Change, Low-carbon Policies, and Business Strategies

Abstract

Climate change has emerged as one of the most critical issues that may completely transform a competitive business environment. The Paris Agreement adopted in 2015 has urged firms to take a more proactive stance toward a low-carbon economy. South Korea, the world’s seventh largest emitter of greenhouse gases (GHG) as of 2010, announced its own voluntary medium-term mitigation goal to reduce GHG emissions by 37% of the “business-as-usual” level by 2030. As one of the key measures to achieve the national goal, South Korea launched an emissions trading scheme (ETS) in 2015. Firms have shown different reactions in addressing climate change issues. This keynote presents how climate change might transform the business competitive environment and a short history of South Korean policies to mitigate climate change. By summarizing several previous studies of my research team regarding climate change and business, this keynote provides strategic and managerial implications for firms how to respond to climate change issues.
Keynote Speech 3
Haiyan Wang is a Professor and the Dean of School of Management and E-Business, Zhejiang Gongshang University, China. She was awarded doctorate of management engineering from Nanjing University of Science and Technology (NJUSt). Prior to join the current faculty, she worked as a post-doctoral researcher at Institute of Industrial Economics of Chinese Academy of Social Sciences (CASS). Her research interests include food quality and safety, spectrum data analysis, and management decision support. She is the PI of more than ten National Research Programs. Her research work appeared in several international journals, including Journal of Raman Spectroscopy, Food Analytical Methods, Analytical Letters, etc. Professor Wang currently serves as the Associate Academician of the International Academy of Quality Science, Member of the American Society for Quality (ASQ), Member of the National Professional Standardization Technical Committee, Member of the China Quality Association Society Committee, Vice Chairman of Jiangsu Provincial Institute of On-Site Statistical Research.

Speech Title
Food Quality and Safety, Spectrum Data Analysis, and Decision Support

Abstract
Food quality and safety has long been a worldwide issue faced by all humans. Food scandals are extensively reported both in developed and developing countries. Food quality and safety involves multiple phases, such as planting/breeding, processing, transportation, packaging, and retailing. Each phase further involves several kinds of physio-chemical data, including e-nose, e-tongue, mass spectrum, and chromatography. To achieve the whole-life-cycle surveillance, the fusion, storage and analysis of these heterogeneous spectrum data poses several special scientific challenges. This keynote speaker will introduce the relevant work in addressing the challenges. 1) Spectrum data analysis methods. For Raman and MALDI-TOF-MS, which have different high levels of sparsity, we proposed an adaptive regularized feature selection method with changeable sparsity penalty functions. We also researched group-LASSO feature selection method by combining chemical priori knowledge. For multi-spectral data analysis, we researched various data fusion strategies and ensemble learning techniques to improve the test power. 2) Data-driven decision support applications. Based on the spectrum data analysis, several application cases have been carried out, including, construction of subject-oriented standard multi-spectral library, food adulteration (e.g. milk powder and horse beef fraud) detection, and genuine geographical product (e.g. herbs) identification.
### A-1 Service Quality Management

- **Room:** Jinman A Hall  
  经满厅 A 区
- **Chair Persons** 分会场主席：SangChan Park; Cui-hua Zhang

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<tr>
<th>Session</th>
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</table>
| A-1-1   | 13:30-13:45 | Forecasting Repurchase of Device and Telecommunication Service in Korea Smart Phone Market: Using Machine Learning and Ensemble Scheme  
JaeHee Bae, TaeGu Kim  
Dept. of Industrial & Management Engineering, Hanbat National University |
| A-1-2   | 13:45-14:00 | Quality Improvement Strategies in Logistic Service Supply Chain Considering the First-mover's Advantage  
Cui-hua Zhang, Yong Ma  
School of Business Administration, Northeastern University |
| A-1-3   | 14:00-14:15 | A Synergy Evaluation System of Quality Behavior for Service-oriented Manufacturing Network  
Liangqing Feng 1,2, Lei Zhang1, Chao Xia1, Wenchuan Li1 and Yuqing Yin1  
1Department of Industrial Engineering, Nanchang Hangkong University  
2College of Management and Economics, Tianjin University |
| A-1-4   | 14:15-14:30 | Artificial Intelligence as a Service (AIaaS): Data Management for Railway Condition Monitoring  
SangChan Park1,a, YooJung Kim2,b and JongUn Won1,c, Ying Quan1,d  
1School of Management, Kyung Hee University, Seoul, Korea  
2Korea Railroad Research Institute, EuiWang, Korea  
3Shandong University of Science and Technology, Qingdao, China |
| A-1-5   | 14:30-14:45 | On Dynamically Monitoring Aggregate Warranty Claims Over the Product Life Cycle  
Chenglong Li1, Xiaolin Wang2, Lishuai Li2, Min Xie2  
1School of Management, Northwestern Polytechnical University  
2Department of Systems Engineering and Engineering Management, City University of Hong Kong |
| A-1-6   | 14:45-15:00 | Achieving the Sustainable Development of Business Incubators: an Assessment of Service Demand and Performance Perception  
Liu Fan, Lei Wang  
College of Economics and Management, Shandong University of Science and Technology |
| A-1-7   | 15:00-15:15 | How to Prevent Future Delivery Crisis in E-commerce Logistics Service in China? Focused on Customer Attitude Change  
Li WANG1, SungMin BAE2,  
Department of Industrial & Management Engineering, Hanbat National University, Daejeon, Korea |
| A-1-8   | 15:15-15:30 | An Application of Kano Model to Identify Quality Attributes of Smart Tourism  
Xiaojing Wang  
School of Management Science & Engineering, Dongbei University of Finance & Economics, Dalian, China |
## A-2 Quality Innovation and Design

- **Room**: Liuxia Hall 流霞厅
- **Chair Persons**: 部分会场主席: Youn Sung Kim; Keqin Wang

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<td>A-2-1</td>
<td>13:30-13:45</td>
<td><strong>Process Optimization Using Sequential Design of Experiment</strong>&lt;br&gt;Lv. Shanshan¹, He. Zhen², Quevedo. Valeria³,⁴, Zhang. Yiming⁵, and Vining. Geoffrey⁶&lt;br&gt;¹School of Economics and Management, Hebei University of Technology&lt;br&gt;²Tianjin University</td>
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<tr>
<td>A-2-2</td>
<td>13:45-14:00</td>
<td><strong>Development of Standard Methodology for Quality Innovation in Small and Medium Business</strong>&lt;br&gt;Dong Chun Kim¹, Yong-ju Kim², Ji Hoon Cho³, and Youn Sung Kim⁴&lt;br&gt;¹Division of Industrial Convergence, HanYang University, Seoul, Korea&lt;br&gt;²The Korea Chamber of Commerce &amp; Industry, Seoul, Korea&lt;br&gt;³Career Development Center, DAEJIN University, Gyeonggi-do, Korea&lt;br&gt;⁴College of Business Administration, INHA University, Incheon, Korea</td>
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<td>A-2-3</td>
<td>14:00-14:15</td>
<td><strong>Product Design Improvement based on Online Reviews Data Analysis</strong>&lt;br&gt;Keqin Wang, Fengjun Wu, Yu Wang, Jing Li, Xinwei Zhang, Shurong Tong&lt;br&gt;Institute of Design Management, School of Management, Northwestern Polytechnical University</td>
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<td>A-2-4</td>
<td>14:15-14:30</td>
<td><strong>Bayesian Closed-loop Optimization Design Considering Model Uncertainty and Data Quality</strong>&lt;br&gt;Linhan Ouyang&lt;br&gt;College of Economics and Management, Nanjing University of Aeronautics and Astronautics, Nanjing 211106, China</td>
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<td>A-2-5</td>
<td>14:30-14:45</td>
<td><strong>Creative Economy and Management of Allselves’ Enlightenment and Empowerment (MOSEE)</strong>&lt;br&gt;HyungWook Kim&lt;br&gt;Dept. of Business Administration, Hongik University</td>
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<td>A-2-6</td>
<td>14:45-15:00</td>
<td><strong>Loss Function on Dual Responses: Better Evaluating Location and Dispersion Effects in Multiresponse Optimization</strong>&lt;br&gt;Liangxing Shi* and Fan Wu&lt;br&gt;Department of Industrial Engineering, Tianjin University</td>
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<td>A-2-7</td>
<td>15:00-15:15</td>
<td><strong>Identifying Heterogeneity in Innovation Diffusion using Linearization of Diffusion Models</strong>&lt;br&gt;TaeGu Kim&lt;br&gt;Dept. of Industrial &amp; Management Engineering, Hanbat National University, Daejeon, Korea</td>
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<tr>
<td>A-2-8</td>
<td>15:15-15:30</td>
<td><strong>Quality Progress on Fused Deposition Modeling</strong>&lt;br&gt;Feng Li, Zhonghua Yu&lt;br&gt;The State Key Laboratory of Fluid Power Transmission and Control, College of Mechanical Engineering, Zhejiang University</td>
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### A-3 Quality Data Modeling

- **Room:** Yinxiu Hall 隐秀厅
- **Chair Persons** 分会场主席: Jai-Hyun Byun; Kaibo Wang

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<th>Session</th>
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| A-3-1   | 13:30-13:45| Monitoring of User-Generated Reviews via a Sequential Reverse Joint Sentiment-Topic Model  
|         |            | Kaibo Wang  
|         |            | Department of Industrial Engineering, Tsinghua University                              |
| A-3-2   | 13:45-14:00| A New Interpretation on Quality Loss Function  
|         |            | Jai-Hyun Byun\(^1\), Yanjing Zhang\(^2\), Yizhong Ma\(^2\) and Chanseok Park\(^4\)  
|         |            | \(^1\)Dept. of Industrial and Systems Engineering, Gyeongsang National University, Jinju, Korea  
|         |            | \(^2\)Dept. of Management Science and Engineering, Nanjing University of Science and Technology, Nanjing, China  
|         |            | \(^4\)Dept. of Industrial Engineering, Pusan National University, Pusan, Korea        |
| A-3-3   | 14:00-14:15| Control Schemes for Two-dimensional Spatial Count Data with Spatial Correlations  
|         |            | Tao Li, Yanfen Shang  
|         |            | College of Management and Economics, Tianjin University                             |
| A-3-4   | 14:15-14:30| A Two-Stage Forecasting Model for Korean Movie Market  
|         |            | SuJin Hwang\(^1\), SuYeon Kim\(^2\) and TaeGu Kim\(^3\)  
|         |            | \(^1\)Dept. of Industrial & Management Engineering, Hanbat National University, Daejeon, Korea  
|         |            | \(^2\) \(^3\)Dept. of Management Science and Engineering, Nanjing University of Science and Technology, Nanjing, China         |
| A-3-5   | 14:30-14:45| The Mixed Modeling and Optimization of Functional Parameters based on Support Vector Regression  
|         |            | Fangcheng Wang\(^1\), Qing-an Cui\(^2\), Yumin Liu, Uk Jung\(^2\), Li Liu  
|         |            | \(^1\)Business School and School of Management Engineering, Zhengzhou University  
|         |            | \(^2\)Business School, Dongguk University, Seoul, Korea                              |
| A-3-6   | 14:45-15:00| Forecasting Korean Drama Ratings based on Programming Strategy  
|         |            | MinJeong Shin\(^1\) and Taegu Kim\(^3\)  
|         |            | \(^1\)Dept. of Industrial & Management Engineering, Hanbat National University, Daejeon, Korea  
|         |            | \(^3\)Dept. of Industrial and Systems Engineering, Gyeongsang National University, Jinju, Korea          |
| A-3-7   | 15:00-15:15| Reliability Modeling with Condition-based Maintenance for Binary-state Deteriorating System Considering Zoned Shock Effects  
|         |            | Guanzhou Wei, Zhen He, Shuguang He  
|         |            | College of Management and Economics, Tianjin University                              |
| A-3-8   | 15:15-15:30| Monitoring Nonlinear Profile based on Wavelet Reconstruction and SVDD  
|         |            | Guangjie Tian\(^1\), Yumin Liu\(^1\), Zheyun Zhao\(^1\), UK Jung\(^1\), Shuai Zhang\(^1\), Ning Wang\(^1\)  
|         |            | \(^1\)Business School, Zhengzhou University, Zhengzhou450001, China  
|         |            | \(^2\)Business School, Dongguk University-Seoul, Korea                                |
# B-1 Process Management and Control

- **Room:** Jinman A Hall  
  锦满厅A区
- **Chair Persons** 部分会场主席: Uk Jung; Jian Li

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| B-1-1   | 15:50-16:05| Influence Plots for the High-Dimensional Data  
Dae-Heung Jang\(^1\), Jae Eun Lee\(^1\) and Christine M. Anderson-Cook\(^2\)  
\(^1\)Dept. of Statistics, Pukyong National University, Pusan, Korea,  
\(^2\)Statistical Sciences Group, Los Alamos National Laboratory, Los Alamos, NM, USA |
| B-1-2   | 16:05-16:20| Monitoring High-dimensional Categorical Data Streams based on Goodness-of-fit Test  
Kaizong Bai and Jian Li  
School of Management, Xi’an Jiaotong University |
| B-1-3   | 16:20-16:35| New Control Chart for Detecting Time between Events  
Liang Qu, Yuan Gao  
College of Management and Economics, Tianjin University |
| B-1-4   | 16:35-16:50| A Variable-selection Control Chart via Gaussian Mixture Model for Multi-modal and  
High-dimensional Processes  
Dandan Yan\(^1\), Shuai Zhang\(^2\) and Uk Jung\(^3\)  
\(^1\)Dept. of Management, Donggu University, Seoul Korea,  
\(^2\)School of Business, Zhengzhou University, Zhengzhou, China |
| B-1-5   | 16:50-17:05| An Integrated Model of Statistical Process Control and Conditional based Maintenance  
for Series Deteriorating Systems  
Liping Liu  
Nanjing Normal University |
| B-1-6   | 17:05-17:20| Economic Design of EWMA Control Charts with Variable Sampling Intervals for  
Monitoring the Mean and Standard Variation under Preventive Maintenance and  
Taguchi's Loss Functions  
Li Xue\(^1\), \(^2\), Zhen He\(^3\), Li Zhang\(^2\)  
\(^1\)College of Management and Economics, Tianjin University,  
\(^2\)School of Management Science and Engineering, Zhengzhou University of Aeronautical Science and Technology, Pohang, Korea,  
\(^3\)Department of Information Management and Management Science, Tianjin University, China |
| B-1-7   | 17:20-17:35| Determination of the Best of Best Process Path in Semiconductor Wafer Fabrication  
Process Considering both Quality and Productivity Perspectives  
Dong Hee Lee\(^1\), Jin-Kyung Yang\(^1\), Chang-Ho Lee\(^2\), Seung-Hyun Choi\(^2\), Kwang-Jae Kim\(^2\),  
Shuguang He\(^3\) and Zhen He\(^3\)  
\(^1\)Division of Interdisciplinary Industrial Studies, Hanyang University, Seoul, Korea,  
\(^2\)Department of Industrial and Management Engineering, Pohung University of Science and Technology, Pohang, Korea,  
\(^3\)Department of Information Management and Management Science, Tianjin University, China |
| B-1-8   | 17:35-17:50| A Multistage Manufacturing Process Capability Analysis Method based on Utility Ratio  
Ning Wang\(^1\), Jianfeng Yang\(^1\), Haiyu Wang\(^2\)  
\(^1\)Business School Zhengzhou University,  
\(^2\)School of Economics and Management Zhongyuan University of Technology |
| B-1-9   | 17:50-18:05| Nonparametric Control Charts for Monitoring Multivariate Count Data  
Zhiqiong Wang\(^1\), Zhen He\(^3\) and Peihua Qiu\(^3\)  
\(^1\)School of Management, Tianjin University of Technology, Tianjin, China,  
\(^3\)College of Management and Economics, Tianjin University, Tianjin, China  
\(^3\)Department of Biostatistics, University of Florida, Gainesville, FL, United States |
The 17th China-Korea Quality Symposium

B-2 Quality Design and Analysis

- Room: Liuxia Hall 流霞厅
- Chair Persons 分会场主席: Sung Hyun Park; Yizhong Ma

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<td>B-2-1</td>
<td>15:50-16:05</td>
<td>A Study on Initial Adoption of Advanced Driver Assistance Systems \ Jaehyeon Jun(^1)(^a) and Heejun Park(^2)(^b) \n(^1)Dept. of Industrial Engineering, Yonsei University, Seoul, Korea</td>
</tr>
<tr>
<td>B-2-2</td>
<td>16:05-16:20</td>
<td>Bayesian Modelling and Parameter Optimization for Laser Micro-Drilling Process \ Jianjun Wang, Yizhong Ma \nDepartment of Management Science and Engineering, Nanjing University of Science and Technology</td>
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<tr>
<td>B-2-3</td>
<td>16:20-16:35</td>
<td>Development of a Social Responsibility Model and Management of Social Value for a Company in the Fourth Industrial Revolution \ Sung Hyun Park \nDepartment of Statistics, Seoul National University, Seoul, Korea</td>
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<tr>
<td>B-2-4</td>
<td>16:35-16:50</td>
<td>Robust Optimization of Precision Compliant Product Taking into Account Parameter Uncertainty \ Jiawei Wu, Huaming Song(^*), Fu Huang, Dongsheng Ma, Lisha Wang \nSchool of Economics and Management, Nanjing University of Science and Technology</td>
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<td>B-2-5</td>
<td>16:50-17:05</td>
<td>Relationship between Designers' Demographic Characteristic and Possibility of Difficulties under a Certain Emotion \ Shurong Tong, Xiaoxue Gao \nSchool of Management, Northwestern Polytechnical University</td>
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<tr>
<td>B-2-6</td>
<td>17:05-17:20</td>
<td>A Study on the Analysis of 6th Industry Promotion Business by City and County in Gyeongsangnam-do \ SungUk Lim(^1)(^a), ChangHwa Baek(^1)(^b) \nDept. of Industrial Engineering, Daejin University, Korea</td>
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<tr>
<td>B-2-7</td>
<td>17:20-17:35</td>
<td>Percentile Lifetime Improvement through Designed Experiments with a Non-constant Scale Parameter: a Two-stage Method \ Guodong Wang, Li Zhang, and Qian Li \nDepartment of Management Engineering, Zhengzhou University of Aeronautics, Zhengzhou, China</td>
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<tr>
<td>B-2-8</td>
<td>17:35-17:50</td>
<td>Corporate Sustainability Quality and Firm Value in China: Moderation of Environmental Institutional Pressure \ Woo-Young Yang(^1)(^a), Byoung Sob Han(^1)(^b) and Su-Yol Lee(^2)(^b) \nCollege of Business Administration, Chonnam National University, Gwangju, South Korea</td>
</tr>
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</table>
# B-3 General Quality Management

- **Room: Yinxiu Hall 隐秀厅**
- **Chair Persons 分会场主席: Wan Seon Shin; Qiang Su**

<table>
<thead>
<tr>
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| B-3-1   | 15:50-16:05 | Open Quality for the Era of Industry 4.0: Concept, Methodology and Application  
Wan Seon Shin, Hojun Song, Haewon Kim, Yunji Lee  
Department of Systems Management Engineering, Sungkyunkwan University, Korea |
| B-3-2   | 16:05-16:20 | Developing and Validating a Model of ISO 9001 Effectiveness Gap: Empirical Evidence from China  
Xiaojing Sun, Decheng Wen, Dongwei Yan  
School of Management, Shandong University |
| B-3-3   | 16:20-16:35 | Building Learning System in Malcolm Baldrige Model  
Chung, Kyu Suk  
Dept. of Business Administration, Kangwon National University, Kangwon-Do, Korea |
| B-3-4   | 16:35-16:50 | Manufacturer Encroachment and Product Quality with BPD  
Dongsheng Ma, Huaming Song*, Fu Huang, and Jiawei Wu  
School of Economics and Management, Nanjing University of Science and Technology |
| B-3-5   | 16:50-17:05 | Criteria Summary of Changes MBNQA Models  
KyuSuk Chung¹, and SeungPyo Hong² ³  
¹Dept. of Management Kangwon National University, Kangwon, Korea  
²Seoul Management School Inc. Seoul, Korea |
| B-3-6   | 17:05-17:20 | An Approach to Measure Product Quality based on Fuzzy Target-oriented Preference  
Yujian Qu, Xinwei Zhang, Shurong Tong, Keqin Wang  
School of Management, Northwestern Polytechnical University |
| B-3-7   | 17:20-17:35 | Problems and Solutions of Government Support Policy in 6th Industry  
ChangHwa Baek¹,², SungHoon Hong³, SungUk Lim¹  ³  
¹Dept. of Industrial Engineering, Daejin University, Korea  
³Dept. of Industrial and Information Systems Engineering, Chonbuk National University, Korea |
| B-3-8   | 17:35-17:50 | Risk Factors Assessment and Diagnostic Analysis of Pressure Injury  
Qing Li, Qiang Su  
School of economics and management, Tongji University |
| B-3-9   | 17:50-18:05 | Discuss on the Agricultural Products Export of Cross-Border E-commerce of Henan Province  
Chang Guangshu, Wang Kena, Sun Mingmeng  
Zhengzhou University of Aeronautics |
**B-4 Quality and Safety Management of Agricultural Products**

- **Room:** Jinman B Hall 锦满厅 B 区
- **Chair Persons** 分会场主席: Daqiang Chen

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| B-4-1   | 15:50-16:05| Pricing and Quality Level Decisions of a Food Supply Chain with Governmental Interventions  
Zemin Ju, Jiarong Wang  
School of Management and E-business, Zhejiang Gongshang University |
| B-4-2   | 16:05-16:20| Coordination and Contracts for Two-level Food Supply Chain with Quality-conscious and Price-sensitive Customers  
Daqiang Chen, Haiyan Wang  
School of Management and E-business, Zhejiang Gongshang University |
| B-4-3   | 16:20-16:35| Reliability Analysis of Dairy Product Quality Chain based on Complex Network  
Chao Zuo, Juanjuan Luo, Yinghui Feng  
School of Management and E-business, Zhejiang Gongshang University |
| B-4-4   | 16:35-16:50| Analysis of Critical Chain Nodes in Dairy Product Quality Chain based on Directed Weighted Complex Network  
Juanjuan Luo, Haiyan Wang  
School of Management and E-business, Zhejiang Gongshang University |
| B-4-5   | 16:50-17:05| Multiplayer Game in Food Quality and Safety Supervision  
Guoliang Gao, Haiyan Wang  
School of Management and E-business, Zhejiang Gongshang University |
| B-4-6   | 17:05-17:20| How Food Quality and Safety Information Influence Consumers’ Purchase Decisions in Chinese Baby Milk Market  
Cheng Luo, Haiyan Wang, Chao Zuo  
School of Management and E-business, Zhejiang Gongshang University |
| B-4-7   | 17:20-17:35| Coordinating Quality Level and Production Cost in Food Quality Chain via Bayesian Updates  
Shalei Zhan, Haiyan Wang  
School of Management and E-business, Zhejiang Gongshang University |
| B-4-8   | 17:35-17:50| Rapid Milk Powder Brand Authenticity Identification Test Based on Raman Spectrometry and Adaptive Feature Selection with Sparse Regularization  
Yinsheng Zhang, Haiyan Wang  
School of Management and E-business, Zhejiang Gongshang University |
Symposium Site Information and Maps

HangZhou Hai Hua ManLong Resort

杭州海华满陇度假酒店:

Tel: 0571-28978899

Address: Manjuelong Rd NO.2 in Hangzhou Xihu District

电话: 0571-28978899

地址: 杭州市西湖区满觉陇路2号

HangZhou Hai Hua ManLong Resort

杭州海华满陇度假酒店

![Map of HangZhou Hai Hua ManLong Resort](image-url)
Transportation

- **From Hangzhou Xiaoshan International Airport (A) to HangZhou Hai Hua ManLong Resort (B):**
  - Take airport bus Pinghai Line, get off at Grand Metropark Hotel (杭州维景大酒店), and then take taxi to hotel. It will take about 2 and a half hours from airport to hotel.
  - 🚖: About 60 minutes’ taxi ride at the cost of 120~150 RMB.
- From Hangzhoudong Railway Station (A) to HangZhou Hai Hua ManLong Resort (B):

⚠️: Take subway Line 4, get off at Shuichengqiao (水澄桥), and then take taxi to hotel. It will take about 1 hour from railway station to hotel.

🚗: About 40 minutes’ taxi ride at the cost of 65~75RMB.
Contact Details

联系人信息

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Rongfang Yu 余荣芳
Tel: 0086-17826853305
Overview of School of Management and E-business

School of Management and E-Business is specially established by Zhejiang Gongshang University under the background of modern business in Zhejiang province, an integration of the provincial management science and engineering team and the national modern business platform of Ministry of education. The school focuses on e-business, modern logistics and business intelligence and business data, and serves the society through training, scientific research and social service. With the characteristics of electronic business, the school is committed to become a first-class business intelligence research, application and training center with domestic and international influence.

The school has nine national and provincial supporting platforms, including National E-Business Virtual Simulation Center of the Ministry of Education, Center of National Humanities and Social Sciences Base, National Internet Innovation Platform, Provincial Key Lab of E-commerce and logistics, 2011 Collaborative Innovation Center, Provincial Modern Logistics and E-Commerce and Business Data Center. Located at Hangzhou, the capital of Chinese E-commerce, the school has established close ties with many world famous companies, such as Alibaba (the world’s biggest E-commerce company), Netease and Sunyard. The school also has many training bases with numerous enterprises, from giant Alibaba, Zhejiang Yiwu Small Commodity City and Zhejiang Materials Industry Group to many industrial Park, E-business parks and faster-growing SME E-commerce companies.