

The First International Conference
on Risk Analysis and Crisis Response
September 25-26, 2007
China Executive Leadership Academy Pudong
Shanghai, China

RACR-07 Program and General Information

ORGANIZED BY:

Risk Analysis Council of China Association for Disaster Prevention

HOSTED BY:

Shanghai Maritime University

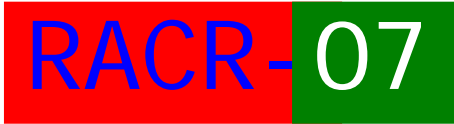
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SUPPORTED BY:

National Natural Science Foundation of China





September 25-26, 2007
Shanghai, China

The First International Conference on Risk Analysis and Crisis Response

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- Tuesday, September 25
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Some Abstracts for Plenary Sessions

- Christopher Frey**, Methods for Characterizing Variability and Uncertainty in Exposure and Risk Analysis
- Shoji Tsuchida**, Disaster Prevention and Risk Research
- Zongzhi Wu**, An Introduction to the Regulations and Standards of Industrial Accident Risk Assessment in China
- Jinren Ni**, Water Erosion Vulnerability and Ecological Risk Analysis in the Yellow River Basin, China
- K. Harald Drager**, A Year in Review – TIEMS and Global Emergency Management
- Da Ruan**, Intelligent Decision and Policy Making Support System
- Youfang Huang**, Risk Management in Port operation, Logistics and Supply Chain
- Da Ruan**, Intelligent Decision and Policy Making Support System

Abstract for Keynote Speech Session

- Jie Lu**, Situation Awareness and Decision Making

RACR-07 – General Information

About RACR

RACR, an acronym for Risk Analysis and Crisis Response, is an international research forum to advance and share the theory and applications of risk analysis and crisis response for applied research in general and for risk management and emergency management.

RACR-07 is the first in the series of international conferences founded by Risk Analysis Council of China Association for Disaster Prevention. The conference will be held in China in part because the Chinese government is paying greater attention to risk analysis and crisis response, and has issued the Master State Plan for Rapid Response to Public Emergencies.

The principal missions of RACR are:

- conducting research on risk analysis for solving intricate problems pertaining to risk management and decision making under uncertainty
- bridging the gap between theory in research institutes and universities and risk management in governments and companies
- encouraging interdisciplinary research and bringing multi-discipline researchers together.

Conference Organization

General Chair: Chongfu Huang, Beijing Normal University, China

Co-Chairs: Christopher Frey, North Carolina State University, USA

Jinren Ni, Peking University, China

Zhongzhi Wu, China Academy of Safety Science and Technology, China

Organizing Committee:

Chairman: Youfang Huang, Shanghai Maritime University, China

Co-Chairs: Xiaofeng Wang, Shanghai Maritime University, China

Dazheng Xu, Shanghai Maritime University, China

Members: Weiping Chen, Shanghai Maritime University, China

Weijiong Chen, Shanghai Maritime University, China

Guangzhong Liu, Shanghai Maritime University, China

Weijian Mi, Shanghai Maritime University, China

Linchi Qu, Shanghai Maritime University, China

Chaojian Shi, Shanghai Maritime University, China

Xing Shi, Shanghai Maritime University, China

Leping Xu, Shanghai Maritime University, China

Yingjie Xiao, Shanghai Maritime University, China

Yongsheng Yang , Shanghai Maritime University, China

Secretary: Chunlin Hou , Shanghai Maritime University, China

Programme Committee:

Chairman: Jiali Feng, Shanghai Maritime University, China

Co-Chairs: Olivier Salvi, INERIS (Institute National de l'Environnement Industriel et des Risques), France

Hiroyuki Kameda, Kyoto University, Japan

Zongfang Zhou, University of Electronic Science & Technology of China, China

Shoji Tsuchida, Kansai University, Japan

Members:

Mohan Balagopalan, South Coast Air Quality Management District, USA

Roberto Bubbico, University La Sapienza, Italy

Changchuan Chan, National Taiwan University, Taiwan, China

Peg Coleman, Syracuse Research Corporation, USA

Yongsheng Ding, Donghua University, China

Michail Faleev, Ministry of Russian Federation, Russia

Tee Guidotti, The George Washington University, USA

Hirotsada Hirose, Tokyo Woman's Christian University, Japan

Vincent Ho, Kowloon-Canton Railway Corporation, Hong Kong, China

Zhiguo Huo, Chinese Academy of Meteorological Sciences, China

Saburo Ikeda, Tsukuba University, China

Pr. Jean-Marie Jacques, University of Louvain, Belgium

Cengiz Kahraman, Istanbul Technical University, Turkey

Jingyi Li, Lanzhou University, China

Xu Li, Fudan University, China

Anlin Liu, China Life Insurance (Group) Company, China

Xilin Liu, Sun Yat-sen University, China

Siuming Lo, City University of Hong Kong, China

Andre Maisseu, University of Paris "Pantheon - La Sorbonne", France

Masaru Matsumoto, Zhong Sheng International Insurance Brokers Co., LTD., China

Scira Menoni, Politecnico di Milano, Italy

Shinsuke Morisawa, Kyoto University, Japan

Raymond Neutra, California Environmental Health Investigations Branch, USA

Norio Okada, Kyoto University, Japan

Marc Poumadere, Groupe de Recherche sur le Risque, l'Information et la Decision, France

Guosheng Qu, National Earthquake Response Support Service, China

Luchuan Ren, China Earthquake Networks Center, China

Ortwin Renn, University of Stuttgart, Germany

Teruko Sato, National Research Institute for Earth Science and Disaster Prevention, Japan

Jo Anne Shatkin, The Cadmus Group, Inc., USA

Phillip C.Y. Sheu, University of California – Irvine, USA

Pr. Maryline Specht, University Paris 5, France

Pierre Syci, South Coast Air Quality Management District, USA

Tianhao Tang, Shanghai Maritime University, China

Yongjing Tang, Tongji University, China

Andrea Thalmann, T-Mobile Germany, Germany

Fabienne Vallee, The Science Park of Brest Iroise, France
Dong Wang, Nanjing University, China
Xiaofeng Wang, Shanghai Maritime University, China
Yiming Wei, Institute of Policy and Management, Chinese Academy of Sciences, China
Kuenyuh Wu, National Health Research Institutes, Taiwan, China
Libin Xie, Administrative Centre of Panzhuhua's Agenda 21, China
Jiquan Zhang, Northeast Normal University, China
Yanqing Zhang, Georgia State University, USA
Jay Zhao, Toxicology Excellence for Risk Assessment, USA

Conference Venue

RACR-07 will be held in Shanghai, the largest city in China and a center of industry, trade, and finance. It lies on the Huangpu River in the eastern part of China.

The China Executive Leadership Academy Pudong (CELAP) with excellent conference facilities, will serve as the conference venue. CELAP is a Shanghai-based national institution funded by the central government to train high level leaders from government and top executives from the business community, focusing on social improvement and economic development.

China Executive Leadership Academy Pudong

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Pudong New Area,
Shanghai 201204, P.R.C.
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Fax: 86-21-5059 5935
E-mail: webmaster@fancyparty.com
<http://61.129.65.35/renda/node3284/index.html>



Social Activities

A welcome reception (in CELAP) is offered on Monday, September 24, from 18h00 to 19h00.

The conference banquet takes place on Tuesday, September 25, at 19h30 in CELAP.

A visiting to *** will be provided by Shanghai Maritime University on Thursday, September 27

RACR-07 Proceedings

RACR-07 Proceedings, published as the book *Advances in Studies on Risk Analysis and Crisis Response* (Atlantis Press, Paris) will be available at the conference.

Correspondence and further information

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Referees:

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Chongfu Huang
Xu Li
Chaojian Shi
Peg Coleman
Jiquan Zhang
Siuming Lo

Jean Marie Jacques
Andre Maisseu
Yongsheng Ding
Guangzhong Liu
Dong Wang
Peg Coleman
Zhiguo Huo

Jiali Feng
Marc Poumadere
Fabienne Vallee
Tianhao Tang
Yiming We
Scira Menoni

Tuesday, September 25, 2007

RACR-07 – PROGRAM

General notice

The RACR-07 Conference consists of plenary, keynote speech and parallel sessions, and a workshop.

All plenary sessions and a keynote speech session, including the Opening Session, take place in *****.

Tuesday, September 25, 2007

08:00 Registration

09:00 Opening Session, chaired by Jiali Feng

Welcome address

Youfang Huang (Shanghai Maritime University)

Christopher Frey (Society for Risk Analysis)

Chongfu Huang (Risk Analysis Council of China Association for Disaster Prevention)

09:30 Plenary Session, chaired by Olivier Salvi and Jinren Ni

Christopher Frey, Methods for Characterizing Variability and Uncertainty in Exposure and Risk Analysis

Chongfu Huang, The Basic Principle of Integrated Risk Assessment

10:30 Coffee break

10:50 Plenary Session, chaired by André Maisseu and Yongsheng Ding

Olivier Salvi, Convergence Towards Integrated Risk Management: Results from the European SHAPE-RISK Project and other Initiatives

Shoji Tsuchida, Disaster Prevention and Risk Reseechs

Zongzhi Wu, An Introduction to the Regulations and Standards of Industrial Accident Risk Assessment in China

12:30 Lunch

Tuesday, September 25, 2007

13:30-16:00 in Room A

Session 1: Integrated Risk Management
Chaired by *Alexander Jovanovec*

Integrated Risk Management Approaches for Planning Sustainable Agriculture
Günther Fischer, Tatiana Ermolieva, Yuri Ermoliev

A System of the Integrated Risk Administration for Marine Environmental Disasters
Based on 3S
Wan Fu, Yue Wang, Qifeng Wang, Xia Lin, Haijing Zhang

Session 2: Decision-making under Risk and Uncertainty
Chaired by *Cengiz Kahraman*

Decision-making of Banks on Credit for SMEs under Risk Management: New
Methodology and Application
Chen Zhang, Ning Zhang, Weidong Zhu, Yong Wu

Methods and Applications of Risk Analysis on Construction Project Cost
Dewen Cheng, Yuhua Wu

Study on Risk Level and Utility in Multi-objective Decision-making about the Risk
Zhanglin Guo, Xinjiang Jiang, Wenbo Wang

A Study of CBR and Decision-Making Support System
Guangyuan Li

Air Pollution Control Using Six Sigma Approach
Ihsan Kaya, Cengiz Kahraman

A Proposal for RFID Integrated Disaster Management Information System
Başar ÖZTAYŞI, Serdar BAYSAN

An Analysis to Determine Regions under Risk According to their Effects on
Environment
Erkan Isikli, M. Serdar Kilinc

Selection of Turkish Agricultural Strategy with Fuzzy AHP Methodology
Nihan Cetin Demirel, G.Nilay Serbest

A λ -Cut Approximate Approach to Supporting Fuzzy Goal Based Bilevel Decision
Making in Risk Management
Ya Gao, Guangquan Zhang, Jie Lu, Xianyi Zeng

An Immunity-based Method for Detecting Stock Market Index Anomaly
Ze-JUN wu Hui-hui qin Yi-Wen liang

Tuesday, September 25, 2007

13:30-16:00 in Room B

Session 3: Methods of Risk Analysis and Crisis Response
Chaired by Germano Resconi

Prediction Model of Annual Precipitation Based on Cloud Model
QIU lin, CHEN Xiaonan, HUANG Qiang and DUAN Chunqing

Effectiveness of Attack Strategies on Weighted Complex Networks
George Leu, Akira Namatame

Fuzzy Multi-attribute Security Risk Assessment Model
GU Yonghao, LIU Yong

Evaluation of Aberrant Methylation Gene Forecasting Tumor Risk Value in Attribute Theory
XU Guang-lin, LIU Yong-chang, Wang Lifang, Li Hua, FENG Jia-li

Competitiveness Evaluation Based on CAJ for Risks Avoiding
Mao Qi-huang, Feng Jiali, Zhen Hong

Risk Control Based on Optical FIBER Sensor Technologies
Suqin Ye , Hao Zhang

A New Approach of Accelerating the Iterative Rapidity of Convergence in Reliability-based Optimum Design
XIN Limin, WANG Tiecheng

A Method of Linguistic Truth-valued Reasoning in Risk Assessment
Li Zou, Xin Liu, Yang Xu

A Fusion Clustering Analysis Algorithm and Its Application in Marine Engineering
Tianzhen Wang, Tianhao Tang

Generalization of Dickson's Formula in the Continuous-time Compound Binomial Risk Model
Guo Lu, Han Li-yan, Liu Guo-xin

13:30-16:00 in Room C

Session 4: Management of Nuclear Risk Crisis
Chaired by Andre Maisseu

Status of the RODOS System for Off-site Emergency Management after Nuclear and Radiological Accidents
W. Raskob¹ J. Ehrhardt

International Cooperation in Disaster Emergencies Management: A globalization perspective

Tuesday, September 25, 2007

Ma Huimin, Yang Qing

Recognition on the Relativity between Typhoon and Storm Surge Using Fuzzy Interval Information Matrix

Xulong Liu, Junxiang Zhang

Cellular Self-defense Mechanisms: Modeling of the DSBs Generation and Repair Process under Ion Radiation

Jinpeng Qi, Shihuang Shao, Hui Bai, and Doudou Li

Application of Entropy to Analyze Risk on Engineering Management

CHEN Zhiding, GUO Qi, CHEN Gang

Risk Management in Scientific Research Used Nuclear Installation Decommissioning Project

Liu Benyu, Zhang Hongqi, Bao Ning, Lu Ruoyu

Framework Structure and Fuzzy Processing of Nuclear Emergency Decision-Making Evaluation System

Lu Neng Zhi

An Intelligent Decision Support System Based on Human-Machine Interaction and Dynamic Track of Psychological Evaluation Criterion

Jiali Feng, Yongxing Zhang

Risk Governance Advances in Europe Across Radioactive Waste and Other Risk Fields

Marc Poumadère, Claire Mays, Beatriz Arantes

Risk Perception and Nuclear Emergency Management in Belgium

B. Carlé, C.O. Turcanu, G.Bombaerts, K. van Aeken, F.Hardeman

Risk Evaluation Model for Radiation Protective Countermeasures Based on Fuzzy Entropy Weight

Jing XIN, Zhixiang XING, Liwen LIU

Session 5: Crisis Response **Chaired by K. Harald Drager**

Value Chain Analysis and Development Scheme of Qingdao's Emergency Response System

Jianhua Li, Zhengping Zhang, Chongfu Huang, Xiangqian Ding

Development of the Emergency Management Platform System

Lan Guiwen, Huang Quanyi

CSB Investigation of the Explosion and Fire at the BP Texas City Refinery on March 23, 2005

Tuesday, September 25, 2007

Don Holmstrom, Mark Kaszniak, Cheryl MacKenzie

Research on Hierarchical Supervision System and Emergency Engineering for
Pudong Industrial Zone in Shanghai
WANG Xiao-qun, ZHANG Xing-rong

Study on Public Emergency Command Platform Based on E-Government Network
Qing Yang, Wen-jun Chen

Study on Emergency Mapping Technology in Rapid Response
An Zhang, Qingwen Qi, Lili Jiang

Study on Dynamic Programming Model of Emergency Decision
ZHANG Yunlong, LIU Mao, ZHOU Xiaomeng & SUN Xiaolei

Establishing the Evaluation Index System Model for Urban Disaster Emergency
Capability
Tian yilin, Yang Qing

13:30-16:00 in Room D

Session 6: Environmental Risks -- Linked to Pollutions
Chaired by *Fabienne Vallée*

Economical Risk Analysis on Design Safety for Seepage Prevention System
CHEN Yonggui, ZOU Yinsheng

Simulation of Leachate Migration in MSW Landfills
CHEN Yong-gui, ZHANG Ke-neng, LIU Fu-dong

SWOT Analysis on Risk Posture of Urban Disaste
SUN Zheng, GAO Hui-ying, SUN Yan, JIA Jing

The Risk Assessment and Regionalization of Ecological Disasters in Jilin Province,
NE China
LIANG Jing-dan, ZHANG Ji-quan

Risk Evaluation to Animal Husbandry Ecosystem
HAO Lu, WANG Jing-Ai, ZHANG Hua

Vortex Characteristic Analysis for The Model of Artificial Jellyfish – the Recovery
Device of Floating Oil
*Yang Yong-sheng, Zhang Hai-yan, Huang You-fang, Liu Tao-wei, Ma Xiao, Gu Wei, Sun
Yong-ming, Dong Guo-xiang, Tang Xiao-rong*

Session 7: Resource Shortage
Chaired by *Leping Xu*

A Hybrid Genetic Algorithm for Resource Leveling Problem

Liming Liu, Hanping Zhao, Jiadong Jiang, Ke Li

Risk of Water Shortage and Carrying Capacity of Water Resources in Yiwu City
FENG Lihua, MAO Zhanglin, ZHAO Xianchan, HUA Yunfeng, et al

16:00-16:10 Coffee Break

Tuesday, September 25, 2007

16:10-17:30 in Room A

Session 8: Risk Modeling, Simulation and Control
Chaired by *Hiroyuki Kameda*

System Simulation Framework for Risk Governance
Jiadong Jiang, Hanping Zhao, Chongfu Huang, Fuping Yang, Ye Wang

Multi-Index Risk Assessment Based on Extenics and BP Neural Network
Qiao Zhongliang, Dong Fajun

Study and Application of Simulation Technology Combined with Fire Evolution and Evacuation for Large Gymnasium
Zhu Wei, Wang Tong, Jin Longzhe

Reduction of Risks in Hydro Engineering Stage Construction Using Discharge Control of Upriver Reservoir
Liu Zhao, Huang Qiang, Yan Ailing, Lin Lei

The Application of Swarm Intelligence in Crisis Management System
Hu Bo, Wang Lei, Wang Xiaoping, Wu Qidi

Session 9: Risk Concept and Cognitive Psychology Analyses
Chaired by *Da Ruan*

On the Understanding of Risk Concept
Zhang-Lin Guo, Jing Tian, Hui-Qiang Sui

The Concept of Biomimetic System of Public Emergency Management
Zhan Wang, Qing Yang

Problems in the Risk Assessment of Major Hazards
Jin Jiangong, Wu Zongzhi, Hu Bin, Liu Fei

Cognitive Psychology Analyses of Risk Decision
Yue Guo, Mao Ting Gao

Catastrophic Risks, Vulnerability and Land Use

Tuesday, September 25, 2007

T. Ermolieva, Y. Ermoliev, G. Fischer, M. Makowski

Cognition-Driven Decision Support System Framework
Li Niu, Jie Lu and Guangquan Zhang

16:10-17:30 in Room B

Session 10: Situation Awareness and Warning Systems
Chaired by Jie Lu

Study on Safety Consciousness and Its Evaluation Index System
LIU Yan, WANG Tong & LIU Kehui

Study on Risk Estimation and Early-warning System of Insurance Company
HU Tao, ZHU Bin

The Experience of Threats and Crises
Lennart Sjöberg

Technological Framework Design of the Urban Emergency Command System
Yang Qifeng, Feng Bin, Song Ping

A Support Vector Machine Model for the Situation Awareness System
Bo Liu, Jie Lu, Guangquan Zhang, Zhifeng Hao, Ya Gao

Risk Analysis in Campus Informatization Systems
Peng Qingsong, Zhang Ming

Session 11: Early Warning and Terrorism
Chaired by Maryline Specht

Setting up an Early Warning System of Industrial Security in Attracting FDI through Applications of PCA and BPNN
Wang Peizhi, Liu Xinying, Li Hong

Construction of Early Warning System for Integrated Engineering Risk Based on Life Cycle
GUO Zhang -lin, LUO yan

Extension Method of Safety Early Warning in Coal Mines
Yuzhong YANG, Liyun WU

Dynamic Analysis of Terrorism Risk by Using Signaling Game
ZHANG Jing, SHEN Shifei, YANG Rui

Probability Analysis of Terrorist Attacks on Urban Facilities Based on Fuzzy Set Theory
Zhanglin GUO, Zengke JIA, Xiaohui LI

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Intelligent Diagnosis System of Terrorist Behavior Tendency in Urban Public
YANG Zhen-hong, WANG Zhi-hu, ZHAO Cheng-fang, ZHANG Xuan, LIU Yan

16:10-17:30 in Room C

Session 12: Earthquake and Geological Disasters

Chaired by *Guosheng Qu*

Research on Emergency Response System for Urban Earthquake
GAO Jie, GAO Huiying, MA Haoran, WU Yi

Seismic Disaster Information Emergency Command System
JIA Jing, GAO Huiying, MO Shanjun, SUN Zheng

Risk Evaluation of Earthquake-induced Site Liquefaction Based on 3D GIS
Hao TANG, Guo-xing CHEN

Risk Analysis of Reinforced Concrete Short Column Based on Random Time-dependent Static Reliability
XIN Limin, WANG Tiecheng

Method for Risk Analysis of Slope Failure Based on Grey-Stochastic Risk
HU Guohua, HU Guihua, CHEN Xiaowei, LIU Xiaoping, SHEN Zhigao

Session 13: Flood

Chaired by *Dong Wang*

China Strategy of Flood Mitigation: From Control to Management
CUI Peng, HAN Yong-shun, GE Yong-gang

The Application and Prospect of Risk Analysis in flood in the Past 25 Years
Dong Wang, Jichun Wu, Qingping Zhu

Multivariable Stochastic Simulation of Design Flood in the Three Gorges Project
Liu Defu(Liu Tehfu), Xie Botao, Pang Liang, Lu Yijun, and Jiang Yunpeng

Risk Zoning of Flooded Area Land in Lower Beaches of the Weihe River
Jingyi Li, Xilan Liu

An Intelligent System for Fast Evaluation of Flood Disaster
Yunxiang Chen, Yongsheng Ding, Xiangfeng Zhang, Bingyong Tang

Study on the Risk Analysis Method of the Flood Forecast System Based on the Principle of Maximum Entropy
Diao Yanfang, Wang Bende

16:10-17:30 in Room D

Session 14: Risk Analysis in the Financial Industry

Tuesday, September 25, 2007

Chaired by *Anlin Liu*

An Approach to Estimating Operational Risk in the Financial Industry

Huang Yundong

Risk Analysis of Computer Network Service Security Management in Commercial Banks

Guoling Lao, Liping Wang

Research on the Innovation of Catastrophe Bond Options in China

Han Liyan¹ Liu Shuo

Operational Risk Assessment: An ERM-POT Approach

Jianping Li, Fanjun Meng, Lijun Gao

How Can China Perfect Exchange Rate Mechanism and Contain Financial Risk at the Same Time?

Jie Ma

Research on Financial Risk Management

WEN Ji-Yue, CHANG Gui-Ran

Measure Operational Risk of Chinese Commercial Banks via Delta-POT Method

Lijun Gao, Jianping Li, Shuping Wang

Analysis for Natural Disasters Insurance Risk Based on Fuzzy Comprehensive Evaluation

LIU Li, WANG Shi-ge, BAI Shu-min

Logistics Insurance Decision

Baojin ZHU, Jing YU

Tunneling Behavior and Corporate Performance: Evidence from Chinese IPO Firms

Li Jin Li Shiming Xiong Xiaozhou

Wednesday, September 26, 2007

08:00 Registration

08:30 Plenary Session, chaired by Toshi Hirano and Xiaofeng Wang

Fabienne Vallee, Global Risk Management in Port Cities and Maritime Regions

Jinren Ni, Water Erosion Vulnerability and Ecological Risk Analysis in the Yellow River Basin, China

K. Harald Drager, A Year in Review – TIEMS and Global Emergency Management

Guosheng Qu, The New Developments of Emergency Management in China

10:30 Coffee break

10:50 Plenary Session, chaired by Marc Poumadère and Anlin Liu

Da Ruan, Intelligent Decision and Policy Making Support System

Youfang Huang, Risk Management in Port operation, Logistics and Supply Chain

11:50 Keynote Speech Session, chaired by Jing Li

Jie Lu, Situation Awareness and Decision Making

12:30 Lunch

13:30-16:00 in Room A

Session 15: Fire Risk Analysis in the Buildings

Chaired by *Siuming Lo*

A Discrete Time Evacuation Model Designed for Safety of Building Egress
WANG Zhen, LIU Mao, LIU Donghua

A Multilayer Fuzzy Synthetic Evaluation Model of Fire Safety for Petrochemical Enterprise
YANG Yusheng, WU Zongzhi, FAN Xiaohua

Forest Fire Risk Monitoring—a Case Study in Peninsular Malaysia
PENG Guangxiong, Shen Wei

Fore-warning Method of Vehicle Fires Based on Interval Analytic Hierarchy Process
Dengyou XIA, Jianhua LI

Wednesday, September 26, 2007

Research of Human Evacuation Behavior in Building Fire Based on Virtual Reality
Chang Deqiang, Zhang Peihong, Cheng Baozhi, Liu Jingxian

Intelligent Approach to Architectural Design for Fire Safety
Eric W.M. Lee

A Quantitative Fire Risk Assessment for Residential Buildings
M.C. HUI, Mingchun LUO

Analysis of a Questionnaire Survey of Occupants' Behaviour in Residential Building Fires in China
Z. Fang, J. P. Yuan, L.L.Xie, S. M. Lo

Analysis on the Evacuation Performance of Exit in Densely Populated Buildings
Peihong ZHANG, Zheng ZHOU, Xiaoyan HUANG, Siuming LO

Possibility of Reducing the Fire Risk by Using PVAc Adhesive for Domestic Furniture and Interior Decoration in a Building Room
Lijing Gao, Toshisuke Hirano

Risk Assessment and Prevention for the Shanghai World EXPO Main Street
Bibo Shi, Yingzhi Yin, Mingchun Luo

Risk Analysis of Evacuation under Building Fire Based on Point Estimate Method
WANG Jinhui, LU Shouxiang, Wang Derun

Fire Safety Analysis for the Non-provision of Sprinkler System in a Treatment Room
C.M. ZHAO, W.K. KWOK

A Fuzzy Decision Support Algorithm for Fire Safety Improvement Works in Buildings
M. Liu, S.M. Lo, B.Q. Hu

13:30-16:00 in Room B

**Session 16: Industrial Engineering Solutions to Risk and Crisis
Chaired by Cengiz Kahraman**

An Integrated Evaluation Approach to Technological Innovation Risk Management
Gülçin Büyükköçkan, Orhan Feyzioğlu, Gülfem Işıklar

Fuzzy Process Capability Indices for Quality Control of Irrigation Water
Ihsan KAYA, Cengiz KAHRAMAN

Multi-Criteria Evaluation of Land Cover Policies Using Fuzzy AHP: The Case of Turkey
Tufan DEMIREL, Hande MUSDAL

Vehicle Route Optimization for RFID Integrated Waste Collection System
Alp Ustundag, Emre Cevikcan

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The Morphogenetic Systems in Risk Analysis
Germano Resconi

Study on the Risk Identification Method of Project Based on "Press-State-Response"
Hou Jinxiu, Zhang Jinchun

Session 17: Safe Production
Chaired by

Risk Analysis on the Safety of Ports Based on ISM
Bai Xiang-en Xiao Ying-jie

The Procedures of Inherently Safer Design
Fan Xiaohua Song Zhanbin Yang Yusheng

Study on Comprehensive Assessment of Accident Risk for Large-Scale Social Events
TONG Rui-peng WU Zong-zh

The Applications of Simulated Model Based on Extend in Port Programming System
Lili Sun, Guangzhong Liu, Xiaorui Chan

Assessment on Gas Prevention in Coal Mine with Fault Tree Analysis
ZHOU Aitao JING Guoxun YU Shuijun

Principles of Risk Management against Ship-source Oil Spill Accidents in Coastal States
Junsong Han Shuohui Zhang Junzhong Bao

Evaluation on Explosion Power of Fuel Air Mixture Based on Artificial Neural Network
De-run WANG Shou-xiang LU Chang-hai LI¹ Jin-hui WANG

Safety Analysis on Fully Mechanized Mining Face
Liyun WU, Yuzhong YANG

13:30-16:00 in Room C

Session 18: Maritime Accidents
Chaired by Yianjie Xiao

Fuzzy Evidential Reasoning to Risk Assessment of Ship Navigation System
Yongtao XI, Quangen FANG, Shenping HU

Risk Analysis and Risk Evaluation Model for Navigating Ships in Heavy Sea
Liu Da-gang, Zhao Qiang, WANG De-qiang, Wu Zhao-lin

Maritime Traffic Environment Risk Analysis Based on Geographical Distribution
Tang Xuhong, Cai Cunqiang, Fan Yaotian

Three-dimensional Vision System of Navigational Simulator for Assessment of Navigation Safety in Design of Harbor and Waterway
GUAN Ke-ping, CHEN Jin-biao, XIAO Yinjie, SHI Chao-jian

Wednesday, September 26, 2007

Divisions of Hydrological Environment in the Northwest Pacific Ocean Sea Area and Risk Assessment on Maritime Navigation

Huang Zhisong, Wang Yanlei, Zhang Ren, et al

Risk Analysis on the Drift of Uncontrolled Ships of the Hangzhou Bay Bridge

Xiao Ying-jie, Guan Ke-ping, Chen Jin-biao, Bai Xiang-en, Feng Hong-xiang

Study on Antiflooding Decision Support System for Damage Ship

CUI Lu-ning, PU Jin-yun, ZHANG Guang-hui

The Damage Probability Influence Analysis of Explosion and Impact to Ship Electric Power System

CUI Lu-ning, PU Jin-yun, Hou Yue

A Study on Qiantang River Shipping Development and the Navigating Surroundings of Shaoxing Coastal Industrial Park Wharf

Chen Jin-biao, Xiao Ying-jie, Guan Ke-Ping, Wu Hui-guo, Bai Xiang-en

Study on the Safety Project of Dangerous Goods in Rivers

YU Jing, ZHU Baojin

Session 19: Supply Chain

Chaired by Hanping Zhao

Study on Decision Support System for Logistics Service Supply Chain Based on Data Warehouse

ZHANG Dehai, SHAO Peiji, LIU Dewen

A Purchase Strategy under the Supply Chain Risk

Li Xu, Fei Duo

13:30-16:00 in Room D

Session 20: Typhoon and Storm Surge

Chaired by Luchuan Ren

Risk Analysis of Typhonic Disaster in China

Liu Defu, Pang Liang, Xie Botao, Jiang Yunpeng

A Framework for Vulnerability Assessment to Typhoon Storm Surge Risk of the Coastal Counties in Guangdong, China

Junxiang Zhang

Typhoon Hazard Assessment Applying Interior-outer-set Model in Fujian Province, China

Jing CHEN, Jing-Ai WANG, Xiang CHEN

A Risk Analysis and Mechanism Diagnoses of Triggering and Maintaining El Nino/La Nina Based on Adaptive-Neural Network Fuzzy Inference System
Zhang Ren, Hong Mei, Yu Dandan, Wang Huizan, Liu Kefeng

Tourism-climate Resources Assessment and Risk Analysis for Core Scenic Spots of Great Jiuzhai
Xiao Tiangui, Zhaobo, Hu Ting, Yin Jianchang, Chen Weibin

Modern Natural Coastal Hazards and Hazard Management in China
Zhenke Zhang, Haitao Tian, Yanming Li, Hongmin Meng, Shaoming Pan

Session 21: Food Safety
Chaired by Marc Poumadère

Risk Assessment for River Water Quality Using Artificial Neural Networks
LIAO Xiaoyu, TONG Zhijun, YANG Lingbin

Water Environmental Health Risk Assessment for Main Rivers of Hunan
HU Guohua, LIU Dongzheng, GUO Feiyan, SONG Hehua

Assessment of Regional Dietary Exposure to Dioxins in Seafood in Japan
HONGBIN CAO, NORIYUKI SUZUKI, TAKEO SAKURAI

16:00-16:10 Coffee Break

16:10-17:30 in Room A

Session 22: Network Security and Social Security
Chaired by Da Ruan

A Structure of Risk Management for Digital Rights
Yishu Luo, Qin Zhu, Jiajin Le

A Model for Predicting the Spreading of Malicious Codes
Mai Qing

Risk Analysis on Sub-Networks of Internet
Xue Weimin, Li Jinsong

Session 23: Fire Disaster Risk
Chaired by Jiquang Zhang

The Application of GIS in Grassland Fire Disaster Risk Management
TONG Zhijun, ZHANG Jiquan, LIAO Xiaoyu

The Risk Analysis of Grassland Fire Disasters Based on Historical data in Northern China

Xingpeng Liu, Jiquan Zhang

The Research on City Fire Risk Comprehensive Evaluation and Its Applications

Lizhi WU, Lian Danjun

Risk Assessment and Regionalization of Grassland Fire Disasters in Western of Jilin Province

Jiquan Zhang, Xingpeng Liu

The Research of Ship Cabin Fire Risk Grade Assessment System

Hou-yue, Pu Jin-yun, Cui lu-ning

16:10-17:30 in Room B

Session 24: Social Security and Public Health

Chaired by Li Xu

The Application of Time Series Model in Researching Of Typical Social Security Incident

Jiang Bo, Shen Shi-Fei, Shu Xue-Ming, Zheng Kui Zhang Da-Peng

Study on Social Stability Model and Forecast Method of Social Safety

Shu Xue-Ming, Zheng Kui, Zhang Da-Peng, Jiang Bo, Shen Shi-Fei, Huang Quan-Yi, Yuan Hong-Yong

The Research of Discrete Model about Stranded People Amount in Confined-spatial Crowd Evacuation

ZHOU Xiaomeng, JIANG Lizhen, GAO Pingping, GAO Junbo

Quantitative Risk Analysis of the Crowd Massing Public Venues

LI Jianfeng, LIU Mao

A Stochastic Model for AIDS Control and Its Risk Analysis

Min Xu, Yongsheng Ding, Liangjian Hu

Treatment of Censored Data and Dependency among Sampling Distributions in Probabilistic Human Health Exposure Assessment

Junyu Zheng, H. Christopher Frey

Risk Model for Predicting the Probability of Hazardous Total Inward Leakage of the Respiratory Protective Device in Public Outbreaks

LEI YANG

Session 25: Analysis on Cases

Chaired by Jingyi Li

Risk Assessment of Aeolian Sand Disaster on Lake in Sandy Area of Inner Mongolia

Yao-Jie Yue, Jing-Ai, Wang, Xue-Yong, Zou, Pei-Jun Shi

Harmonize Evaluate Model of the Risk Management for Compound Pension
Xiaobei Liang, Bingyong Tang

The Research of Routing Design in Wireless Sensor Networks
Wang Chao, Kang Qi , Wang Lei

Yarage Detection and Evaluation System for Some Types of Fighter Planes
Sun Yanpeng, Zhang Zhixian, Liang Chunli

A Research on Risk Management of Public-Private Partnership Mechanism: Case Study with Port-City Waterfront Development
Wen-Chi Huang, Sung-Keng Kao, Kuang-Yu Chen

Research of Risk Assessment Method for Urban Gas Fuel Network
Gao Junbo, Guan Huixing, Gao Pingping, Wang Shen

16:10-17:30 in Room C

Session 26: Transportation Chaired by Yongjing Tang

Study on Total Risk Assessment in Urban Rail Transportation
Dai Baoqian, Wang Tong

Use of Bayesian Method for Assessing Vessel Traffic Risks at Sea
SHENPING HU, XUDONG LI, QUANGEN FANG, ZAILI YANG

Risk Simulation on Transport of Dangerous Goods Using SWARM Simulation Toolkit
Gang Zeng, Chao Huang, ZhenBao Zhao

Fuzzy Approximation Network Perturbation Systems and Its Application to Risk Analysis in Transportation Capacity
Sheng Li, Zou Kai-qi

Analysis of Transport Economy of Scale and Its Crises of Bullwhip Effect
LI Jianli

The Optimization Model of the Selecting Location on Network Logistics Distribution Center
Lingbing Han, Guangzhong Liu

Risk Evaluation of Fairway Traffic Environment Using Uncertainty AHP
WANG Ze-sheng, JIN Yong-xing, ZHU Zhong-hua

Session 27: Food Safety Chaired by

Risk Assessment for River Water Quality Using Artificial Neural Networks
LIAO Xiaoyu, TONG Zhijun, YANG Lingbin

Water Environmental Health Risk Assessment for Main Rivers of Hunan

Guo-Hua Hu, Dong-Zheng Liu, Fei-Yan Guo, He-Hua Song, Shu-Qing Sun

1. Assessment of Regional Dietary Exposure to Dioxins in Seafood in Japan
Hongbin Cao Noriyuki Suzuk Takeo Sakurai

16:10-17:30 in Room D

Workshop for book writers of International Series on “Risk Analysis and Crisis Response”

Chaired by Chongfu Huang

The experience of threats and crises
Lennart Sjöberg

应急响应制图理论、方法与应用
张岸

东营市抗震防灾规划
冯启民

空间决策支持系统在应急管理中的应用
高惠瑛

煤矿瓦斯重大灾害预警理论及应用
杨玉中

水上交通风险评估方法与模型
胡甚平