SUNDAY, 18 MAY 2008	
1200~1700	**PSAM9 Soccer Match** **Venue : The Hong Kong University of Science and Technology**
1830-2030	**Welcome Reception** **Venue : Harbour Room, Kowloon Shangri-la Hotel**

MONDAY, 19 MAY 2008

ROOM SESSION	A-1 to A-3(Harbor 1)	B-1 to B-3(Harbor 2)	C-1 to C-3(Camomile)	D-1 to D-3(Harbor 3)	E-1 to E-3(Rose)	F-1 to F-3(Peony)	G-1 to G-3(Magnolia)	Kowloon I/II
0830~1000		**Opening Ceremony** **Venue : The Grand Ballroom** **Guests of Honor:** Ir Chai Kwong Mak, JP, The Permanent Secretary for Development (Works) Development Bureau, The Government of the Hong Kong Special Administrative Region *Systematic Risk Management in Public Works Projects* Ir Dr. Raymond Ho, SBS, MBE, SBStJ, JP, Member of Legislative Council (Engineering Functional Constituency), The Government of the Hong Kong Special Administrative Region; Hong Kong Deputy to the Eleventh National People's Congress of the People's Republic of China *Safety Management in the Construction Industry in Hong Kong* **Keynote Speaker:** Prof. George E. Apostolakis, Massachusetts Institute of Technology, United States of America *Decision Analysis and Risk Management*						
1000~1030		**Coffee/Refreshment Break**						Exhibition
		A-1 **Reliability Data Analysis**	**B-1** **Environmental Risk Assessment**	**C-1** **Fire Risk Analysis**	**D-1** **Performance Shaping Factors in Human Reliability Analysis**	**E-1** **Accident Analysis**	**F-1** **Uncertainty Analysis in Reliability and Risk Assessment**	**G-1** **Risk Insights from Applications**	
		Min Xie	**Jan Erik Vinnem** **S. Guikema**	**T. Matsuoka**	**Erasmia Lois**	**Davide Manca**	**Piero Baraldi**	**Andrew Hale** **M. Christou**	
		# 027 Development of Web-Based Reliability Database System for PSA and Maintenance Rule Ψ *Seok-Won Hwang* *Jang-Hwan Na* *Hyuk-Soon Lim* *Myung-Su Kim*	# 316 Assessment of Chlorine Gas Release Hazard in TEHRAN'S Drinking Water Chlorination Stationa Ψ *Javad Adl* *Zeynab Nezamoddini*	# 061 Fire Engineering and Risk Assessment of Historic Buildings Ψ *Zdena Rosicka*	# 047 A Team Performance Prediction Model *Sheue-Ling Hwang* Ψ *Guo-Feng Liang* *Jhih-Tsong Lin*	# 150 Adaptation of US Department of Energy Method of Design Basis Accident Selection to a Study of the Risks to Patients in Pediatric Emergency Medical Care Ψ *Jonathan Young* *Donna Woods* *Jane Holl* *et al.*	# 031 Impact of Epistemic Uncertainties on the Probabilistic Assessment of the Emergency Operating Procedure 'Secondary Side Bleed and Feed' Ψ *Jörg Peschke* *Martina Kloos*	# 051 Comparison of DID and PSA Insight of the PHWR Outage Ψ *Hae Cheol Oh* *Myung Ki Kim* *Sung Yull Hong*	
1030~1200		# 097 Development of a Reliability Data Handbook for Piping Components in Nordic Nuclear Power Plants – Part II Ψ *Anders Olsson* *Bengt Lydell*	# 432 Development of the Safety Policy for the Borexino Experiment at the Gran Sasso National Laboratories in Italy. Ψ *Stefano Gazzana* *Domenico Barone* *Augusto Goretti*	# 142 Multi-attribute Selection from Alternative Systems of Water Sprinklers Ψ *Egidijus R. Vaidogas*	# 111 Modelling and Assessment of Dependent Performance Shaping Factors through Analytic Network Process *P. Trucco* Ψ *M. De Ambroggi*	# 294 An Application of a SSMS Model to the Analysis of Accidents Ψ *Jaime Santos-Reyes* *Alan N. Beard*	# 032 Consideration of Additional Uncertainties in the Coupling Model for the Estimation of Unavailabilities due to Common Cause Failures Ψ *J. C. Stiller* *A. Kreuser* *C. Verstegen*	# 226 Availability and Risk Management in IGCC Power Generation Plants: a Structured Approach for a Non-mature Technology Ψ *Joël Luyk* *Dimitrios Karydas*	

PSAM9 Program Summary

# 209	# 398	# 167	# 416	# 421	# 480	
The Centralized Component Reliability Database ZEDB Comparison of Evaluation 2006 with Data of Other Operating Experience Based Databases	Quantitative Risk Calculation for Land Use Decisions: the Validity and the Need for Unification	Reliability Analysis on Occupant Evacuation of Elevated Metro Station in Fires	Analysis of Task Types and Error Types Involved in Human-related Unplanned Reactor Trip Events in Korean Nuclear Power Plants	Translating the Risk of Major Accidents into Opportune Safety Distances from Dangerous Establishments: Rrecent Developments of the European Regulation as Deriving from Selected National Practices	Updating Uncertainty of Rare Event Occurrence Probability Based on Bayesian Approach	
Ψ *Jörg Blombach* *Kai-Uwe Brahmstaedt* *Ralf Buckermann* *Hartmut Schmaltz*	Ψ *P.A.M. Uijt de Haag* *L. Gooijer* *P.J.M.G. Frijns*	Ψ *Congling Shi* *Maohua Zhong* *zhicheng Liu*	Ψ *Jaewhan Kim* *Jinkyun Park*	Ψ *Claudia Basta* *Michalis Christou* *Michael Struckl* *Ben Ale*	Ψ *Akira Yamaguchi* *Takashi Takata*	
# 274		# 178	# 102	# 119	# 358	
Reliability Database for PSA in Support to the Design of the Innovative CEA 2400 MWth Gas Fast Reactor		Reliability Analysis on Platform Fire Smoke Control in Deep Buried Island Metro Station	Use of Meta-Analysis to Derive PSF Multipliers for HRA	Offshore Consequence Analysis Using Grid-Based Approach	Risk Analysis of an Hydrogen Refueling Station: Uncertainty in Consequence Modeling	
Ψ *Paul Saignes*		Ψ *Maohua Zhong* *Congling Shi* *Tairan Fu* *et al.*	Ψ *Candice D. Griffith* *Sankaran Mahadevan*	Ψ *Faisal Khan* *Paul Amyotte* *Ravichandra Pula* *et al.*	*Carpignano A.* Ψ *Francesco Ganci* *Ponte E.*	
		# 310				
		Fire Safety Discussion for a Highly Automated Container Terminal beyond Traditional Regulations Based on Risk Assessment				
		Ψ *Matthias Herold* *Thorsten Weidl*				

1200~1330	Lunch Break

	A-2 Statistical Modeling I	B-2 Infrastructure I: Methods of Vulnerability Analysis	C-2 Fire PSA I	D-2 Verification & Validation of Human Reliability Analysis Methods	E-2 Industrial Safety I	F-2 PSA Applications I	G-2 Software for PSA
	Christophe Berenguer	**George Apostolakis**	**James C. Lin**	**Joan Harvey**	**K. Øien**	**Claudia Vivalda**	**Steven Epstein**
		James Lambert	**Severino Zanelli**	**Radim Bris**		**Attila Bareith**	**Todd Paulos**
	# 028	# 053	# 024	# 093	# 009	# 020	# 110
	A Bayesian Approach for Determination of Sample Capacity	Towards a Framework for Vulnerability Analysis of Interconnected Infrastructures	FMEA of Cable Failures within a Fire PSA	Risk Comparison of Methods for Dependency Determination within Human Reliability Analysis	Functional Safety of SRECS for GE Gas Turbine in Oil & Gas Applications According to IEC 62061 Requirements	Probabilistic Ssafety Assessment of Dam Sspillway Gate Systems	FinPSA: New Features in PRA Software
	Shi-Jing WU Ψ *Ming QIN* *Xuan SUN* *Xiao PENG*	Ψ *Irene Eusgeld* *Wolfgang Kröger*	Ψ *Joachim Herb* *Ewgenij Piljugin*	Ψ *Marko Čepin*	Ψ *Vincenzo Amato*	Ψ *Philippe Nonclercq* *Chraibi Hassane* *Zeller Maxime*	Ψ *Ilkka Niemelä*
1330~1500	# 043	# 515	# 060	# 302	# 030	# 076	# 133
	Bayesian Modeling of Population Variability – Practical Guidance and Pitfalls	Comparative Evaluation of Modeling and Simulation Techniques for Interdependent Critical Infrastructures	PSA Significance of Events with Electrically Induced High Energy (Arcing) Faults	Validation and Verification of HRA Methods by Nuclear Power Plant Simulator Exercises	Modelling the Effects of BLEVE Blast on a Building Spanning an Underpass	Effects of the Power Upgrade Project GREAT on the PSA study for the Nuclear Power Plant Ringhals 3 in Sweden	AIMS-PSA: A Software for Integrating Various Types of PSAs
	Ψ *Dana L. Kelly* *Corwin L. Atwood*	Ψ *Irene Eusgeld* *Wolfgang Kröger*	Ψ *Marina Röwekampa* *Heinz Peter Berg*	Ψ *Gueorgui Petkov*	Ψ *S.I. Suddle* *J. Weerheijm* *A.C. van den Berg* *J.N.J.A. Vambersky*	Ψ *Cilla Persson* *Helena Wall*	Ψ *Sang Hoon HAN* *Ho-Gon LIM* *Joon-Eon YANG*

# 292	# 452	# 351	# 366	# 127	# 115	# 239
Towards a Bayesian Aapproach to the Viability of a SMS	Modelling Distributed Vulnerabilities in a Complex Network.	Probabilistic Models to Estimate Fire-induced Cable Damage at Nuclear Power Plants	Techniques for Verification of Expert Models for Dependence Assessment in Human Reliability Analysis	Comparing Floods and Industrial Accidents: a Conceptual Framework for Multi-Risk Assessment	Applications of Quantitative Risk Assessment Technique on Liquefied Natural Gas Tank Systems	A PRA Software Platform for Hybrid Causal Logic Risk Models
Ψ *Jaime Santos-Reyes* *Alan N. Beard*	Ψ *Russell D Pride* *C Di Mauro* *C Logtmeijer* *et al.*	Ψ *Genebelin Valbuena* *Mohammad Modarres*	Ψ *Luca Podofillini* *Piero Baraldi* *Vinh N. Dang* *et al.*	*Renato Rota* Ψ *Simona Caragliano* *Sara Brambilla* *Davide Manca*	*Tsu-Mu Kao* Ψ *Chun-Sheng Weng*	Ψ *Dongfeng Zhu* *Chengdong Wang* *Katrina Groth* *Ali Mosleh*
# 338	# 519	# 478	# 400	# 214	# 376	# 307
Investigation of T-book Reliability Data Used In Probabilistic Safety Assessments: Comparison between Sites, Reactors and Types	Risk and Threat Assessment –a Soft Systems Type Approach to Scenario Analysis	Level 1 External Events (Internal Fire, Internal Flood and Seismic Events) PSA Accident Sequence Quantification for Point Lepreau Refurbishment Project	Analysis on the Accident of Human Error for Equipment System	Ensuring the Quality of Safety Analyses in Industry	Probabilistic Performance Assessment Methodology for Long term Subsurface CO2 Storage	A Presentation of the MCS BDD Algorithm in the RiskSpectrum Software Package
Ψ *Per Hellström* *Ralph Nyman*	Ψ *Christopher C. Wills* *Adamantios Koumpis* *Gerald Quirchmayr* *Jorma Kajava*	Ψ *Maria Wei* *S. Sawh* *A. Nainer* *et al.*	Ψ *Xikui Wang* *Haijing Zhou* *Liming Ren* *Changhong Gu*	Ψ *Veikko Rouhiainen* *Anna-Mari Heikkilä*	Ψ *Claudia Vivalda* *Laurent Jammes*	Ψ *Ola Bäckström* *Daniel Ying*

1500~1520	**Coffee/Refreshment Break**

	A-3 Statistical Modeling II	B-3 Infrastructure II: Vulnerability Analysis with Applications to the Electrical Network	C-3 Fire PSA II	D-3 Human Behavior & Risk I: Safety culture	E-3 Industrial Safety II	F-3 PSA Applications II	G-3 Importance Measures, Uncertainty and Sensitivity Analysis
	Dana Kelly **N. Matahri**	**Wolfgang Kröger** **David Johnson**	**M. Roewekamp** **Todd Paulos**	**Simone Colombo** **Kurt Petersen**	**Kaisa Simola** **Claudia Vivalda**	**Michael Yau** **Bruce Hallbert**	**Piero Baraldi**
1520~1650	# 112 Scan Statistics: Looking for Clusters of Undesirable Events Ψ *Julie Berthon* *Jean-Marc Deshouillers* *Yves Dutuit* *et al.*	# 337 Methods to Monitor the Risk of Electric Power Systems Ψ *Bjørnar Heide Knudsen* *Jan Erik Vinnem* *James H. Lambert*	# 091 Development of Risk Assessment Method for Fires Caused by Earthquake (V) Ψ *Takeshi Matsuoka* *Katsunori Ogura*	# 075 Company Culture, Intuition, and System Safety Ψ *Reinier A. Bosman* *Erik J.W.F. Wiersma*	# 254 A New Approach to Stakeholder Assessment Ψ *Joan Harvey* *Oliver Heidrich* *Nicola Tollin*	# 055 Risk-Based Design of Entrance Channel Depths: a Case Study at the Entrance Channel of Mombasa Port, Kenya Ψ *Quy Nguyen Minh* *Vrijling J.K.* *Pieter van Gelder*	# 242 New Results on the Differential Importance Measures of Markovian Systems Ψ *Phuc Do Van* *Anne Barros* *Christophe Berenguer*
	# 446 Analysis of Natech Accidents Recorded in Major Accident Databases. *Michela Campedel* Ψ *Valerio Cozzani* *Elisabeth Krausmann* *Ana Maria Cruz*	# 040 Bulk Power Risk Analysis: Ranking Infrastructure Elements According to their Risk Significance Ψ *G. E. Apostolakis* *A. M. Koonce* *B. K. Cook*	# 159 Fire Scenario Sensitivity Case Studies for Commercial Nuclear Power Plant Risk-Managed Technical Specifications Implementation *James K. Liming* Ψ *Andrew A. Dykes* *C. Richard Grantom* *Roland F.*	# 144 Industrial Safety Culture – Leading Indicators and Application Ψ *Paul Amyotte* *Faisal Khan* *Micaela Demichela* *Norberto Piccinini*	# 309 Quantification of Occupational Risk from Accidents Ψ *I.A. Papazoglou* *L.J. Bellamy* *K.C.M. Leidelmeijer* *M. Damen*	# 336 SKI Research Project on Defence in Depth PSA – Assessing Defence in Depth Levels with PSA Methods Ψ *Per Hellström* *Michael Knochenhauer* *Ralph Nyman* *et al.*	# 510 Variance-Based Sensitivity Analysis for the Long-Term Safety of an Underground Radioactive Waste Repository in Rock Salt Ψ *Dirk-Alexander Becker* *Sabine M. Spiessl*
	# 396 Risk Analysis for Critical Infrastructure Systems: An Approach Based on Statistical Learning Theory Ψ *Seth D. Guikema*	# 233 Vulnerability Analysis of a Power Transmission System *Enrico Zio* Ψ *Cristina-Andreea Petrescu* *Giovanni Sansavini*	# 218 Computation of Quantitative Fire Risks Using Two-Model Monte Carlo Simulation and CFD Fire Model *Jukka Hietaniemi* Ψ *Simo Hostikka* *Olavi Keski-Rahkonen*	# 012 Evaluating the Success of Safety Culture Interventions Ψ *Andrew Hale* *Frank Guldenmund* *Joy Oh* *et al.*	# 422 Challenges in Industrial Dynamics: Coupling Process Simulation with Accident Simulation Ψ *Sara Brambilla* *Davide Manca*	# 372 Insights from Risk Evaluations of LNG Facilities Ψ *James C. Lin*	# 403 Risk Significance Importance Measures for a Networked System Ψ *Stefano La Rovere* *P. Vestrucci* *M. Sperandii*
	# 240 Design and Testing of Innovative Composites for Passive Fire Protection *Gabriele Landucci* *Francesco Rossi* *Cristiano Nicolella* Ψ *Severino Zanelli*	# 058 Risk Associated with Transformer Degradation in Electric Generating Systems Ψ *Shuzhen Xu* *Enrique Susemihl*	# 240 Design and Testing of Innovative Composites for Passive Fire Protection *Gabriele Landucci* *Francesco Rossi* *Cristiano Nicolella* Ψ *Severino Zanelli*	# 018 From Safety Culture to Safety Intelligence Ψ *Barry Kirwan*	# 423 Safe Process Start-up Procedures Based on an Operator Training Simulator: a Case Study Ψ *Flavio Manenti* *Davide Manca*		# 364 Use of Uncertainty Importance Measures to Complement Risk Importance Measures in PSA Ψ *Qiao Liu* *Toshimitsu Homma*
	# 169 Methods for Testing Statistical Significance of Ageing and Safety Indicator Trends *Jussi K Vaurio* *Janne Viertävä* Ψ *(Toivo Kivirnta)*				# 066 IN-Depth Analysis Of Work-Related Fatalities In Taiwan Ψ *Chia-Fen Chi*		# 222 Risk, Uncertainty and Sensitivity Analyses in a Recent Safety Assessment of a Spent Nuclear Fuel Repository in Sweden Ψ *Allan Hedin*

PSAM9 Program Summary

TUESDAY, 20 MAY 2008

ROOM SESSION	A4 to A-6(Harbor 1)	B-4 to B-6(Harbor 2)	C-4 to C-6(Camomile)	D-4 to D-6(Harbor 3)	E-4 to E-6 (Rose)	F-4 to F-6(Peony)	G-4 to G-6(Magnolia)	Kowloon
0845~0945	**Plenary Speaker:**		**Mr. Andrew McCusker, Operations Director, MTR Corporation Limited, Hong Kong, China** *Risk Management - An Essential Strategy for Business Success* Venue : The Grand Ballroom					**Exhibition**
0945~1015	**Coffee/Refreshment Break**							

1015~1145	**A-4** **Dynamic Reliability Analysis**	**B-4** **Next Generation PSA: Roundtable Discussion on the Open PSA Initiative**	**C-4** **Risk Assessment for Space Systems**	**D-4** **Human Reliability Analysis: Methods & Applications I**	**E-4** **Hazard Analysis**	**F-4** **Safety of Transportation Systems: Railway I**	**G-4** **Bayesian Modeling and Expert Opinion for Risk Analysis**
	Tunc Aldemir **Enrico Zio**	**Steven Epstein** **John Sorman**	**Chester Everline** **Andrew A. Dykes**	**Pierre Le Bot**	**Severino Zanelli** **Kurt Petersen**	**Giuseppe Maschio** **Andrew Hale**	**Dana Kelly** **Louis H.J. Goossens**
	# 132 A Formal Approach to Derive Configurable Markov Models for Arbitrarily Structured Safety Loops Ψ *Thomas Gabriel Lothar Litz Bernd Schrörs*	# 520 The Open PSA Initiative for Next Generation Probabilistic Safety Assessment Ψ *Steven Epstein Antoine Rauzy F. Mark Reinhart*	# 122 The Probabilistic Risk Assessment of the CloudSat Profiling Radar Ψ *Todd Paulos John Klohoker*	# 017 Application of the CARA HRA Tool to Air Traffic Management Safety Cases *W. Huw Gibson* Ψ *Barry Kirwan*	# 084 The Application of 3D QRA Technique to the Fire/Explosion Simulation and Hazard Mitigation within a Naphtha-Cracking Process Ψ *Yet-Pole I Ching-Hong Chong*	# 186 Innovations in the Legal Framework on Risk Assessment for Railway Systems of the European Community Ψ *Peter Mihm Thierry Breyne Dragan Jovicic*	# 312 An Expert Opinion Elicitation Method Based on Bayesian Intervals Estimation and Computational Searching Algorithms: an Application to Oil Refinery Risk Analysis Ψ *Paulo R. A. Firmino Romero L. M. Sales Filho Enrique L. Droguett*
	# 268 Computing Systems' Reliability Dynamics Ψ *Salvatore Distefano*		# 399 Using Credal Networks to Integrate Qualitative and Quantitative Information for Safety Assessment in Space Systems Ψ *Heng Zheng Haijing Zhou Liming Ren Changhong Gu*	# 045 Development of an Expert System for Generator Operation Training *Yung-Chih Liu Sheue-Ling Hwang* Ψ *Guo-Feng Liang*	# 100 Hazard Assessment of Major Accidents Triggered by Intentional Acts of Interference Ψ *Martina Sabatini Severino Zanelli Valerio Cozzani*	# 496 ALARP and Cost-benefit of Safety Measures for the Evacuation Concept of a Long Norwegian Railway Tunnel Ψ *Øyvind Reitan Anne-Kathrine Kalager*	# 206 Supporting Expert Assessment of Argument Structures in Trust Cases *Lukasz Cyra* Ψ *Janusz Gorski*
	# 269 Reliability of Dependent-Dynamic Systems Ψ *Salvatore Distefano Antonio Puliafito*		# 414 Probabilistic Modeling Techniques Applied to the Estimation of Risk for Space Launch Vehicle Systems *Sergio Guarro* Ψ *Michael Yau*	# 378 Incorporation of a Human Reliability Model into the ADAPT PRA Methodology Ψ *Kyle Metzroth Richard Denning Carol Smidts Tunc Aldemir*	# 116 An Approach for Identifying the High-Risk Zones around Vessels and Pipes Containing Flammable Liquids Ψ *Julian Argirov*	# 188 Setting up Safety Targets on Railway Systems of the Member States of the European Community Ψ *Peter Mihm Roberto Piazza Marcus Anderson*	# 038 Twenty Years of Experience with Expert Judgments Ψ *Louis H.J. Goossens Roger M. Cooke*
	# 390 Markov/CCMT Modeling of the Benchmark System and Incorporation of the Results into an Existing PRA Ψ *Diego Mandelli T. Aldemir P. Bucci et al.*			# 463 Development of Human Reliability Analysis Approach for Fire Probabilistic Risk Assessment Ψ *Jan Grobbelaar Jeff Julius Kaydee Kohlhepp Frank Rahn*	# 296 Rationalized Alarm Logic Design Based on Process Hazard Analysis Ψ *Yu Shazawa Yukiyasu Shimada Tetsuo Fuchino*		

| | | | | # 477 Fires in Enclosures: a Comparison of Experimental Results with two Computational Fluid Dynamics Codes Ψ *Gabriele Ferrara Marco D'Amico Sabatino Ditali* | | |

Conference Luncheon
IAPSAM General Meeting
Venue : The Grand Ballroom

1145~1330

Luncheon Speaker: **Mr. Bernard Fung, Chairman & CEO, Aon Asia Pacific Limited, Hong Kong, China**
Contemporary Risk Management Issues

	A-5 **Passive Systems Reliability I**	**B-5** **Infrastructures and Security I**	**C-5** **Risk-Informed Application I**	**D-5** **Human Reliability Analysis Benchmarking: Experimental Test Design & Approach**	**E-5** **Risk Management I**	**F-5** **Safety of Transportation Systems: Railway II**	**G-5** **Security and Emergency Response**
	Bob Youngblood **Luciano Burgazzi**	**Irene Eusgeld** **V. Rouhiainen**	**H. Hamzehee** **Claudia Vivalda**	**Helena Broberg** **Hélène Pesme**	**Paolo A. Bragatto** **Knut Øien**	**Takehisa Kohda** **Robin Hirsch**	**T. Aven** **Wolfgang Kröger**
	# 086 Fatigue Reliability Analysis of Pressure-reducing Valve ⁣ Ψ *Faquo Sun Bifeng Song Weimin Cui*	# 042 A Stochastic Modeling Approach for Simultaneous Demands in Domestic Water Supply Systems Ψ *L.T. Wong K.W. Mui*	# 052 Application of Risk-informed Performance Index in GNPS and LNPS Ψ *Ning Zhang Haiying Xi Wei Zheng*	# 360 Benchmarking HRA Methods Against Simulator Data – Design and Organization of the International HRA Empirical Study Ψ *Vinh N. Dang Andreas Bye Erasmia Lois et al.*	# 295 Understanding Risk And Sustainability - The Future For Risk Managers? Ψ *David Smith*	# 114 A Non-existent Series of Railway Accidents Ψ *Gilles Dupin*	# 056 The Impact of Change in Operational Conditions of a Drifting Rescue Unit on Its Risk Function Ψ *Leszek Smolarek*
	# 179 Assessing Physical Process Failure Probability of Passive System in an Advanced Reactor by Using M.C. Method Ψ *Ruichang Zhao Jun Zhao Tao Liu Jiejuan Tong*	# 420 Influence of a Statutory One-call System on the Risk of Natural Gas Pipelines Ψ *G.M.H. Laheij G.R. Kuik R. van Elteren A.A.C. van Vliet*	# 200 Use of the PSA and Safety Performance Assessment in Improving Regulatory Inspection System Ψ *Dae-Wook Chung Hoon-Ju Lee*	# 406 Defining the HRA Analysis Task in HRA Method Benchmarking – Approaches and Outcomes in the International Empirical Study Ψ *John A. Forester Vinh N. Dang Erasmia Lois*	# 311 A Fundamental Study on the Risk Financing of the Cyclone Risk in India Ψ *Hiroyuki Watabe Koji Suzuki Harumi Yashiro Sei'ichiro Fukushima*	# 182 Task Load Analysis of KTX Drivers Using the NASA-TLX Method Ψ *Jonghyun Ko Wondea Jung Jinkyun Park*	# 138 Analyzing Emergency Response Using a Systems Perspective Ψ *Marcus Abrahamsson Henrik Jönsson Henrik Johansson*
1330~1500	# 272 Application of Integrated Methodology for Thermal Hydraulics Uncertainty Analysis (IMTHUA) on LOFT Test Facility Large Break Loss of Coolant Accident Ψ *Mohammad Pourgol-Mohammad Modarres Ali Mosleh*	# 224 Countering Malevolent Acts on Complex Systems by Anticipating and Using Efficient Keys to Make the Right Decision at the Right Time Ψ *Julien Piwowar Eric Châtelet Patrick Laclémence*	# 264 New Insights on Risk-Informed Performance-Based Approaches to Technology-Neutral Regulatory Framework for Generation IV Reactors Ψ *Inn Seock Kim Sang Kyu Ahn Soon Joon Hong Hun-Joo Lee*	# 430 The International Human Reliability Analysis Empirical Study: Simulator Scenarios, Data Collection and Identification of Human Failure Events Ψ *Helena Broberg Per Øivind Braarud Salvatore Massaiu*	# 489 Managing Programmatic Risk in Strategic Decisions - A Methodology Framework for Programmatic & Strategic Risk Assessment and Management Ψ *Feng Hsu*	# 355 Case Study in the Assignment of Safety Integrity Requirements for Driverless Metro System in Singapore Ψ *Julian Kwan Chin Nang Tang Kwee Seng Yap*	# 237 Perspectives of Security for Nuclear Facilities *Martin Reingardt Andreas Diwes Wolfgang Tietsch* Ψ *(Ralf Obenland)*
	# 516 Methods for Comparative Assessment of Active and Passive Safety Systems with Respect to Reliability, Uncertainty, Economy, and Flexibility	# 151 The Use of Dynamic Stochastic Social Behavior Models to Produce Likelihood Functions for Risk Modeling of Proliferation and Terrorist Attacks	# 308 Interpretation and Risk Evaluation of Technical Specification Conditions	# 407 Benchmarking Human Reliability Analysis (HRA) Methods Against Simulator Data – Method for the Comparison	# 441 Diversification Modeling for Risk Management of Safety and Security Programs	# 509 The Case Study of Radio Alert in a Railway Context: Integration of Subjective Data in the Decision Making Process	# 485 Risk and Security Assessment of Container Supply Chains

Ψ *Jiyong Oh* *Michael Golay*	Ψ *Jonathan Young* *Sandy E Thompson* *Alan J. Brothers* *et al.*	Ψ *Ola Bäckström* *Anna Häggström* *Kaisa Simola*	Ψ *John A. Forester* *Vinh N. Dang* *Andreas Bye* *et al.*	Ψ *James H. Lambert* *Nilesh N. Joshi*	Ψ *TEA Céline*	*Z.L. Yang* *S. Bonsall* *I.D. Jenkinson* Ψ *J. Wang*	
# 503 A New Methodology for Assessing Passive System Reliability Ψ *A.K. Nayak* *M.R. Gartia* *V. Jain* *et al.*		**# 369** Study on Technical Improvements for Six Safety State Functions Monitoring during Eemergency Operation of LINGAO 3&4 under Construction in China Ψ *Shi Ji* *Bao Qi* *Li Yan*					
1500~1520	**Coffee/Refreshment Break**							

	A-6 **Passive Systems Reliability II**	B-6 **Infrastructures and Security II**	C-6 **Risk-Informed Application II**	D-6 **Human Behavior & Risk II: Balancing Risks & Processing Safety Information**	E-6 **Risk Management II**	F-6 **Safety of Transportation Systems: Automotive**	G-6 **Safety Management Systems**
	Piero Baraldi	**James Lambert**	**Kurt Petersen**	**Cornelia Spitzer**	**George Apostolakis**	**Enrico Zio**	**Odd Nordland** **Janusz Gorski**
1520~1650	# 013 Approaches and Methods for Uncertainty Evaluation of Thermal-Hydraulic System Codes Calculations Ψ *Alessandro Petruzzi* *Francesco D'Auria*	# 215 Development of a Multi-Organizational Strategy for Managing Risks, Disasters and Emergencies Ψ *Walter J. Ammann*	# 193 Use of PRA in Risk-Informed Classification of Piping Segments of Loviisa NPP Ψ *Kalle Jänkälä* *Nici Bergroth* *Ilkka Paavola*	# 166 Risk Perception and the Introduction of a P-Phrase Risk Assessment Tool Ψ *Michael Chiu Ming Leung* *Johnny Yin Nin Mok*	# 103 Risk Treatment Analysis: Using the Idea of 'Object' to Create New Tools for Selecting and Assessing Risk Treatments Ψ *Jason Michael Woodruff*	# 153 Deceleration Meter: A Management Tool for Reducing Over-reliance in Collision Warning When Using Adaptive Cruise Control System Ψ *Makoto Itoh*	# 130 Testing a Safety Management System in Aviation Ψ *Pei-Hui Lin* *A.R. Hale* *C. van Gulijk* *et al.*
	# 021 Incorporation of Passive Systems Within a PRA Framework Ψ *Luciano Burgazzi*	# 301 An Approach to the Management of Terrorist Attacks in Urban Areas Using Dynamic Simulation *Giuseppa Ancione* *Roberto Lisi* Ψ *Giuseppe Maschio* *Maria Francesca Milazzo*	# 250 Assessment of the Probability of ATWS under Consideration of Different Success Criteria for Reactor Trip Ψ *Heiko Kollasko* *Jörg Blombach*	# 177 Risk Management in Systems: Learning to Recognize and Respond to Weak Signals Ψ *Eve Guillaume*	# 267 Risk Management Application in Accelerator Facilities Ψ *Mohamad-Ali Azarm* *Meng Yue*	# 157 A Detecting System Based on Fuzzy Sets for Combating Driver Fatigue Ψ *Cheng-Li Liu* *S. T. Uang*	# 232 An Integrated System for Safety Analysis and Management in the LPG Industry Ψ *Paolo A. Bragatto* *Patrizia Agnello* *Silvia Ansaldi* *Paolo Pittiglio*
	# 143 Inherent Safety Implementation Throughout the Process Design Lifecycle *Alessandro Tugnoli* *Faisal Khan* Ψ *Paul Amyotte*	# 359 Analysis of Energy Supply Disturbances and Energy Security of Supply in Lithuania *J. Augutis* Ψ *Vaida Matuziene* *R. Krikstolaitis*	# 380 OEDC/NEA and JRC RISMET Project: Benchmarking of RI-ISI Methodologies Ψ *Kaisa Simola* *Arne Eriksson* *Alejandro Huerta*	# 241 Safety on an Edge – A Possible Organized Trade-off between Long-Term Safe Work Performance and Regularity in Production Processes Ψ *Rolf Johan Bye* *Jørn Fenstad*	# 327 Development of Early Warning Indicators Based on Incident Investigation Ψ *Knut Øien*	# 220 Effects of Tailored Alarm Timing for Forward Collision Warning Systems on Driver Behaviour and Trust in the Systems Ψ *Genya Abe* *Makoto Itoh*	# 375 Some Problems of Air Traffic Safety Investigation *Jacek Skorupski* Ψ *Anna W. Stelmach*
	# 395 Methodology for Thermal-Hydraulics Code Structure Uncertainty Assessment Ψ *Mohammad Pourgol-Mohammad* *Mohammad Modarres* *Ali Mosleh*		# 488 Designing a New Nuclear Power Plant with Optimized Safety and Performance Ψ *Aline Ellia Hervy* *Jean-Baptiste Gourdel*	# 324 Safety Management and "Paperwork" – Offshore Managers, Reporting Practice, and HSE *Gunnar M. Lamvik* Ψ *Rolf J. Bye* *Hans Y. Torvatn*	# 391 Application of Probabilistic Methods to Manage Risks on a Commercial Satellite Program Ψ *Peter T. Katsumata* *W. David Featherman* *Tweed Ross III* *Michael J. Lopez*	# 286 Fundamental Probabilistic Analysis on Effectiveness of Safety-presentation Type on Safe Driving Support System Ψ *K. Okabe* *T. Hiraoka* *H. Kumamoto* *M. Kamata*	# 216 French Methodology for Safety Assessment Based on Performance Indicators Ψ *Naoëlle Matahri*
				# 279 The Obsession With Controlling Risk – Is It Stifling Opportunity? – Dare To Dream Or Continue To Nightmare!! Ψ *David Smith*			

WEDNESDAY, 21 MAY 2008								
ROOM **SESSION**	**A-7 to A-9(Harbor 1)**	**B-7 to B-9(Harbor 2)**	**C-7 to-C-9(Camomile)**	**D-7 to D-9(Harbor 3)**	**E-7 to E-9 (Rose)**	**F-7 to F-9(Peony)**	**G-7 to G-9(Magnolia)**	**Kowloon**
0830~1000	**Venue : The Grand Ballroom** **Plenary Speaker:** **Prof. Way Kuo President-designate of City University of Hong Kong, Hong Kong, China** *Challenges in Dealing with Modern Reliability Issues* **Prof. Terje Aven, University of Stavanger, Norway** *What is Risk? Different Perspectives and Implications for Risk Management*							**Exhibition**
1000~1030	**Coffee/Refreshment Break**							
1030~1200	**A-7** **Software Reliability Analysis** **Tunc Aldemir** **M. Minichino**	**B-7** **Safety Management in Various Industries** **Giuseppe Maschio**	**C-7** **Reliability Analysis of Dynamic Systems** **Bob Youngblood**	**D-7** **Analysis of Human Error** **Marko Čepin** **Pierre Le Bot**	**E-7** **Safety and Risk Analysis Modeling in Various Industrial Sectors** **Severino Zanelli**	**F-7** **Nuclear Reactor Shutdown PSA I** **Ching N. Guey**	**G-7** **Cost-Benefit Analysis** **Paolo Trucco**	
	# 245 Testing Framework for Embedded Software Based on Software Safety Requirement Assessment Ψ *Masayuki Hirayama* *Satomi Yoshizawa* *Yutaka Ukon* *Arisa Endo*	# 174 Comparison of Health Monitoring Strategies for a Gradually Ddeteriorating Ssystem in a Stressful Environment Ψ *Estelle Deloux* *Bruno Castanier* *Christophe Berenguer*	# 285 A Dynamic Radiation Risk Assessment Method Using System Dynamics *Kyungmin Kang* Ψ *Moosung Jae* *Un Chul Lee*	# 019 Emergency Operation in Nuclear Power Plants: Proposition of an Analysis Protocol to Highlight Collective Team Performance in Simulation Situations Ψ *Cecilia De la Garza* *Pierre Le Bot*	# 083 Safety-relevant Properties of Nanoparticles Ψ *Gerhard Klein*	# 063 Some Results of the Low Power and Shutdown Seismic Risk Assessment for the Paks NPP Ψ *József Elter* *A. Bareith* *E. Hollo* *Z. Karsa*	# 070 Review of Cost-benefit Analysis (CBA) Methodology for Decision-making Related to Safety Modifications Ψ *Paula Calle Vives* *Alain Dubreuil-Chambardel* *Dominique Vasseur* *Mustapha Guesmia*	
	# 339 Reliability Growth in Software Development Processes: A BBN Analysis of the Concept Ψ *Mario Brito* *John May*	# 419 Safety Assurance of China Manned Spacecraft Ψ *Chunlei Liu* *Ling Shen* *Haijing Zhou* *Liming Ren*	# 344 Recent Developments and Insights from Application of ADS-IDAC Dynamic PRA Platform Ψ *Y. James Chang* *Davide Mercurio* *Vinh Dang* *Ali Mosleh*	# 203 Development of a Root Cause Analysis Method for the Human-Related Events Ψ *Ji Tae Kim* *Jin Kyun Park* *Chang Ju Lee* *et al.*	# 347 Risk Aanalysis on the Special Needs of Nanotechnology Ψ *Thorsten Weidl* *Gerhard Klein* *Rolf Zöllner*	# 105 Insights from Low Power and Shutdown Human Reliability Analysis Ψ *Xuhong He* *Ning Zhang* *Anders Olsson*	# 041 An Epistemic Approach for IAQ Assessment of Air-conditioned Offices in Hong Kong *P. S. Hui* Ψ *L.T. Wong* *K.W. Mui*	
	# 107 Safety Activities for Improving Safety-Critical Software Reliability Ψ *Gee-Yong Park* *Kee-Choon Kwon*	# 101 Rapid Environment and Health Risk Assessment for Transboundary Effects of Industrial Accident Management Model REHRA – *Bruno Frattini* Ψ *Neil Manning* *Fabrizio Bucci* *et al.*	# 276 Implementation of a Dynamic PRA Approach for the Prediction of Operator Errors During Abnormal Nuclear Power Plant Events Ψ *Kevin Coyne* *Ali Mosleh*	# 260 Quantifying the Unimaginable – the Case for Human Performance Limiting Values Ψ *Barry Kirwan* *Ian Umbers* *Jim Edmunds* *Huw Gibson*	# 438 Probabilistic Analysis of Hazardous Eevents and Safety of the Ignalina Nuclear Power Plant Ψ *Robertas Alzbutas* *Kristina Kupčiunienė* *Juozas Augutis*	# 465 Shutdown Risk Management during Outage Using PSA *Kenji Murayama* *Norihisa Hashida* Ψ *Taichi Higashiyama* *et al.*	# 475 Preventive Resource Allocation of Complex Systems and Apical Dominance Ψ *Quan Long* *Min Xie* *NG Szu Hui*	
	# 280 Demonstration of the Context-Based Software Risk Model Method for Risk Informed Assurance and Test of Software-Intensive Space Systems *Scott Dixon* Ψ *Michael Yau* *Sergio Guarro*		# 281 The Use of Distributed Computing for Dynamic PRA: The ADS Approach Ψ *Dongfeng Zhu* *Yung Hsien Chang* *Ali Mosleh*	# 319 Impact of Extended Power Uprate on the Human Error Probability of Probabilistic Safety Assessment of Maanshan Nuclear Power Station *Cheng-Hung Huang* Ψ *Min Lee*	# 467 Numerical Modeling of Jet fires from a Hole on High-pressure Gas Pipelines *Yang Zhao* Ψ *Jianbo Lai* *Tianhua Chang* *Yitai Ma*	# 464 The Risk Monitoring System COSMOS for At-Power and Shutdown Conditions Ψ *Kei Ohya* *Takahiro Kuramoto* *Kensuke Toyoshima* *et al.*	# 417 The Household Benefits Assessment of the Flood Reduction Plan in Flood-prone Area: a Case Study in Sinwen, Chiayi, Taiwan *Hsin-Chi Lia* Ψ *Yen-Lien Kuo* *Daiqee Shaw* *Te-Hsiu Huang*	

	A	B	C	D	E	F	G
		# 354 SimPRA: a Simulation-Based Probabilistic Risk Assessment Framework for Dynamic Systems Ψ *Hamed S. Nejad* *Ali Mosleh*	**# 440** Human-Machine System Dependability Analysis for the Risk Management Process Based on Bayesian Networks Ψ *Y. Bouhanik* *P. Millot* *T. Bouhoufani* *A. Dib*				**# 433** Modeling Supply Chain Competition between Conventional and Alternative Transportation Fuels: Cost and Risk Ψ *Shiyan Chang* *Xiliang Zhang*
1200~1330	<td colspan="7" align="center">**Lunch Break**</td>
	A-8 **Reliability Methods and Applications I**	**B-8** **Safety Methods and Applications I**	**C-8** **PRA Modeling of Digital Instrumentation and Control Systems I**	**D-8** **Human Reliability Analysis Benchmarking: Results**	**E-8** **Risk Management Process Utilized in Diverse Industries I**	**F-8** **Nuclear Reactor Shutdown PSA II**	**G-8** **Operating Experience and Safety Feedbacks**
	Faguo Sun **Ji Hwan Cha**	**Stefan Hirschberg**	**Tunc Aldemir** **Thor Myklebust**	**Pierre Le Bot** **Erasmia Lois**	**Andrew A. Dykes**	**Jeanne-Marie Lanore** **Attila Bareith**	**Andrew Hale** **Philippe Hessel**
	# 078 Unavailability of a Redundant System with One Repair Team Ψ *Koichi Suyama* *Nobuko Kosugi*	**# 050** Impact Evaluation of Safety Margins in the LAGUNA VERDE Nuclear Power Plant Using a Deterministic and Probabilistic Methodology Ψ *Verónica Godinez* *Ramón López*	**# 117** Robust Fault Injection For Quantitative Reliability and Risk Assessment: A Demonstration on a Benchmark I&C System Ψ *Nishant J. George* *Carl R. Elks* *Michael A. Reynolds* *et al.*	**# 429** The International HRA Empirical Study: Experimental Results and Insights into Performance Shaping Factors Ψ *Helena Broberg* *Michael Hildebrandt* *Salvatore Massaiu*	**# 054** Handling Risks in the Electric Power Sector Ψ *Wolfgang Kröger*	**# 044** Risk Monitor during Shutdown of CANDU NPPs Ψ *Myung-Ki Kim* *Hae-Chul Oh* *Hui-chang Yang*	**# 229** Key Issues on Sharing and Transformation of Lessons from Experiences by Actor Organisations in the Aviation Industry Ψ *F. Koornneef* *J. Kingston* *E. Beauchamp* *et al.*
1330~1500	**# 135** Functional Safety of Safety Related Systems with Safe Shutdown Ψ *Hitoshi MUTA* *Koichi SUYAMA* *Yoshinobu SATO*	**# 277** The Method Analytic Hierarchies Process for the Search and Selection Supplier Ψ *Lotfi Azzabi* *Dorra Ayadi* *Abdessamad Kobi* *et al.*	**# 352** Digital I&C System Categorization Method for use in Informing Nuclear Power Plant Failure Data Analysis and Risk Analysis Ψ *S.A. Arndt* *M. E.Waterman*	**# 361** Results from a Pilot Benchmarking Study Of HRA Methods – a Comparison of Method Predictions against the Outcomes Observed in the Simulator Study Ψ *Vinh N. Dang* *John A. Forester* *Andreas Bye* *et al.*	**# 106** Further Development of a Causal Model for Air Transport Safety (CATS); the Complete Model Ψ *B.J.M. Ale* *L.J. Bellamy* *R. van der Boom* *et al.*	**# 059** Development of Shutdown PSA Model for Daya Bay NPP Ψ *Zhichao Yang* *Jianbing Guo* *Jiefei Chung*	**# 278** Value of Analyzing Operating Events Ψ *R. Youngblood* *G. Maggio* *C. Everett* *A. Hall*
	# 146 Estimating the Reliability of Electronic Parts in High Radiation Fields Ψ *Chester Everline* *Karla Clark* *Guy Man* *et al.*	**# 334** A Fuzzy Decision System for the Approval of Major Changes at COMAH Installations *Paolo A. Bragatto* Ψ *Maria Grazia Gnoni* *Gianni Lettera* *Francesco A.*	**# 459** Use of Traditional PRA Methods for Digital System Reliability Modeling to Support Regulatory Decision-Making *A. Kuritzky* *Tsong-Lun Chu* Ψ *(John Monninger)* *et al.*	**# 259** Insights from Comparison of HRA Method Predictions with Empirical Data on Human Performance in Accident Scenarios Ψ *Gareth W. Parry* *Erasmia Lois* *John Forester* *et al.*	**# 236** Risks and Priorities of National Programs to Solve Nuclear Legacy Problems in the Russian Federation Ψ *Leonid A. Bolshov*	**# 362** Development of Standardized Probabilistic Risk Assessment Models for Shutdown Operations Integrated in SPAR Level 1 Model Ψ *S. Khericha* *J. Mitman*	**# 388** Data Aanalysis of the Reactor Pressure, Coolant Level and Main Recirculation Flow Calibration Data and Failure Events for Olkiluoto 1 and Olkiluoto 2 BWR Ψ *Jari Pesonen*
	# 300 Application of Implicit and Explicit Reliability Models for Incorporating Ageing Effects Ψ *Gueorgui Petkov*	**# 511** Project Technical Certification within a Progressive Assurance Framework Ψ *R N Dumolo* *D Hill*	**# 104** A General Framework of Safety Assessment for a Control Logic and Its Application to Balancing between Safety and Control Performance Ψ *Koichi Suyama*	**# 425** HRA Insights from the "International empirical study" in 2007 : the EDF Point of View Ψ *Hélène Pesme* *Pierre Le Bot* *Patrick Meyer*	**# 333** Construction Design and Management Regulations (CDM) (2007) Ψ *Nattasha Freeman*	**# 251** Shutdown PSA for Ringhals NPP Unit 3. Insights, Overview and Results Ψ *Peter Jacobsson* *Cilla Persson* *Michael Knochenhauer*	**# 495** Intelligent Pigging Towngas' Health Check for Its Transmission Pipelines Ψ *Leo M H Leung* *Jacqueline T Y Hui*

						Yvonne Adolfsson		
# 092 Development of Shutdown PSA Model for Daya Bay NPP Ψ *Takeshi Matsuoka*	ꞌ		ꞌ		ꞌ		ꞌ	

1500~1520	**Coffee/Refreshment Break**						
	A-9 **Reliability Methods and Applications II**	**B-9** **Safety Methods and Applications II**	**C-9** **PRA Modeling of Digital Instrumentation and Control Systems II**	**D-9** **Human Reliability Analysis: Methods & Applications II**	**E-9** **Risk Management Process Utilized in Diverse Industries II**	**F-9** **Reliability and Risk-Based System Improvement and Optimization**	**G-9** **PSA Experiences & Research**
	P. Vestrucci **Leszek Smolarek**	**Chester Everline** **Inn Seock Kim**	**S.A. Arndt** **Bruce Hallbert**	**Min Lee** **Simone Colombo**	**Makoto Itoh**	**Attila Bareith** **Z. Simic**	**John Monninger**

1520~1650	# 088
	Contribution to Availability Assessment of Systems with One Shot Items
	
	Ψ David Valis
	  Miroslav Koucky
		# 096
		Towards a Proactive Safety Approach in the Design Process: the Case of Printing Machinery
		
		Ψ Elie Fadier
		  Cecilia De la Garza
			# 389
			A Benchmark System for the Reliability Modeling of Digital Instrumentation and Control Systems
			
			Ψ Diego Mandelli
			  T. Aldemir
			  J. Kirschenbaum
			  et al.
				# 148
				Application of the Human and Organizational Reliability Analysis in Accident Management (HORAAM) Method for the Updating of the IRSN level 2 PSA Model
				Ψ Véronique Fauchille
				  Laurence Esteller
				  Emmanuel Raimond
				  Nadia Rahni
					# 039
					The Value of Risk for Validating Grid Related Operational and Capital Expenditure
					
					Ψ Harry van Breen
					  Anton Janssen
						# 082
						Probabilistic Maintenance and Asset Management on Moveable Storm Surge Barriers
						
						Ψ P.B. Webbers
						  J.A. van den Bogaard
						  S.E. van Manen
						  J.A. van Akkeren
							# 121
							A Pilot Study on The Best-Estimate Thermal-Hydraulic Analysis Methodology Applied for a Probabilistic Safety Assessment
							
							Ψ Ho-Gon Lim
							  Sang-Hoon Han
							  Jun-Eon Yang
							  Goon-Cherl Park

	# 512
	Reliability Analysis of Non-Homogeneous Multi-State Ageing Consecutive "k out of n: F" Systems
	
	  Sambor Guze
	Ψ Krzysztof Kolowrocki
		# 297
		Inspection Planning of Safety Protective Systems Using Bayesian Networks
		
		Ψ Takehisa Kohda
		  Hiroki Tokunaga
			# 502
			Integrated Software Hazard Analysis Method for Digital I&C Systems
			
			  Hui-Wen Huang
			  Chunkuan Shih
			Ψ Tsu-Mu Kao
			  et al.
				# 180
				The Application of the Enhanced Bayesian THERP in the HRA Methods Empirical Study Using Simulator Data
				
				Ψ Jan-Erik Holmberg
				  Kent Bladh
				  Johanna Oxstrand
				  Pekka Pyy
					# 137
					Validation Studies for Human Damage in Building Fire Model
					
					Ψ Daniela Hanea
					  Ellen Jagtman
						# 219
						Study on Methodology to Evaluate Risk Importance Based on "Segment"
						
						Ψ Hiroaki Shimozaki
						  Tsuyoshi Uchida
						  Satoshi Miura
						  Masahiro Yamashita
							# 270
							Generation IV International Forum Risk and Safety Working Group – On the Safety of Generation IV Nuclear Systems
							
							Ψ Timothy J. Leahy
							  Gian Luigi Fiorini

	# 284
	Framework for the Reliability Evaluation of Environmentally Assisted Cracking of Ni-base alloy Components in PWR
	
	Ψ Tae Hyun Lee
	  Il Soon Hwang
		# 304
		Problems of Establishing Fragility Functions for the Building Structures Subjected to Fire
		
		Ψ Egidijus R. Vaidogas
			# 408
			Application of the Dynamic Flowgraph Methodology to a Digital Instrumentation and Control System Benchmark Study
			
			Ψ Michael Yau
			  Scott Dixon
			  Majid Motamed
			  Sergio Guarro
				# 262
				Peer Review of the NARA HRA Technique
				
				  Ian Umbers
				  Jim Edmunds
				Ψ Barry Kirwan
				  et al.
					# 474
					Treatment of Risks in Sustainability Assessment of Energy Systems
					
					Ψ Stefan Hirschberg
					  Christian Bauer
					  Peter Burgherr
					  et al.
						# 322
						Risk Analysis for Resource Planning Optimization
						
						Ψ Kar-Ming Cheung
							# 450
							WGRISK and PSA: Past, Present, and Future
							
							  N. Siu
							Ψ J.-M. Lanore
							  P. De Gelder
							  et al.

	# 290
	Research and Application of Mechanical System Reliability Estimation Model Based on Information Fusion
	
	Ψ Tianxiang Yu
	  Weimin Cui
	  Bifeng Song
	  Shengnan Wang
		# 470
		Reducing Risk at the Platform Edge Interface – Is Technology the Answer?
		
		Ψ Robin Hirsch
			# 455
			Evaluating the PFD of Instrumented Safety Systems with Partial Stroke Testing
			
			Ψ Luiz Fernando Oliveira
				# 374
				Collecting Data for MERMOS Using a Simulator
				
				Ψ Pierre Le Bot
				  Hélène Pesme
				  Patrick Meyer
					# 314
					Optimization of Availability and Cost for the Heating System in an Oil Refinery through Semi-Markov Process and Simulated Annealing
					  Paulo R. A. Firmino
					Ψ Márcio C. Moura
					  Enrique L. Droguett
						# 411
						A New Method for Evaluating AOT and STI in the Optimization of Technical Specifications
						
						Ψ H. Wang
						  Y. Li
						  R. Yuan
						  et al.
							# 456
							PSA Research and Development at the U.S. Nuclear Regulatory Commission
							
							  N. Siu
							  M. Stutzke
							Ψ (John Monninger)

	# 493
	Reliability and Safety Assessment of Critical Infrastructure Systems
	
	Ψ Gaku Shoji
	  Nobutaka Kurozumi
		# 471
		Reducing Risk On Escalators – Methods And Decision Factors
		
		Ψ Robin Hirsch
		  Hing Hon Lau
					# 331
					Commercial Property Management ~ Low Risk Environment or is it?
					
					Ψ Nattasha Freeman
						# 171
						Safety Interlock System in Support of Process Optimization and Maximum Energy Use
						
						  Youn-Jong Kim
						Ψ Hee-Choen Cho
						  Young-Lim Hong
						  Kyu-Sun Lee	

1800~2230	**Gala Dinner - Bauhinia harbor Cruise** **Hotel Lobby Pick Up - 1730**						

THURSDAY, 22 MAY 2008								
ROOM SESSION	**A-10 to A-12(Harbor 1)**	**B-10 to B-12(Harbor 2)**	**C-10 to C-12(Camomile)**	**D-10 to D-12(Harbor 3)**	**E-10 to E-12 (Rose)**	**F-10 to F-12(Peony)**	**G-10 to G-12(Magnolia)**	**Kowloon**
0830~1000	**Plenary Speaker:**	**Venue : The Grand Ballroom** **Ir Kwong-wai Ho, JP, Director of Electrical and Mechanical Services, Electrical and Mechanical Services Department,** **The Government of the Hong Kong Special Administrative Region** *Managing Public Safety with a Risk Based Approach*						**Exhibition**
1000~1030	**Coffee/Refreshment Break**							
1030~1200	**A-10 Reliability Methods and Applications III** **Mitra Fouladirad**	**B-10 Emergency Planning and Decision Making** **Andrew A. Dykes**	**C-10 Risk Assessment Approaches** **P. Vestrucci** **Marko Čepin**	**D-10 Human Behavior & Risk III** **Joan Harvey** **Steven Epstein**	**E-10 Occupational Safety** **Enrico Zio**	**F-10 PSA Applications III** **Bruce Hallbert** **Jeanne-Marie Lanore**	**G-10 Risk Analysis of Transport Systems** **Robin Hirsch**	
	# 108 Reliability Calculations within the Limits of Computer Accuracy Ψ *Radim Briš*	# 217 Constructing a Contextual Human Information Processing Model for Warning Citizens Ψ *Simone Sillem* *Erik (J.W.F.) Wiersma*	# 072 Risk Based Approach for Long-Term Plan of Coastal Flood Defences: a Vietnam Case Ψ *Cong V. Mai* *Han Vrijling* *P.H.A.J.M. van Gelder*	# 204 Adaptation as an Element in the Design of Emergency Response Systems *Kurt Petersen* *Kerstin Eriksson* Ψ *(Marcus Abrahamsson)*	# 071 Model for Implementation of Work Safety and Health Management Systems: A Real Study Based on OHSAS and Checkland with Application in Brazil and Portugal Ψ *Walter Franklin Marques Correia* *Denise Dumke de Medeiros*	# 057 Use of PSA at Institute for Radiological Protection and Nuclear Safety for EPR licensing purposes Ψ *Gabriel Georgescu* *François Corenwinder* *Jean Michel Evrard*	# 029 Lowering Transport Risks with the Basic Network: an Aadequate Institutional Shift or an Insufficient Change? *A.V. van der Vlies* Ψ *S.I. Suddle*	
	# 175 Determination of Parameters of Two-Dimensional Warranty at Limited Level of Arranty Costs Ψ *Zdenek Vintr* *Michal Vintr*	# 243 Squeezing the Contractors – the Production of Commercial Accidents Ψ *Rolf Johan Bye* *Jørn Fenstad*	# 073 Risk Informed Approaches to Protect Equipment in High Risk Industries Ψ *Alexander Knoll*	# 205 Left-right Confusion as the Cause of Wrong-side Surgery: Implications for Medical Education Ψ *Joan Harvey* *Jennifer Macrae* *Scott Fraser*	# 305 Development of Cost and Benefit Toolkits for Industrial Safety and Health Works Ψ *Hunszu Liu*	# 184 Role of PRA and Applications in Licensing of Olkiluoto 3 Nuclear Power Plant in Finland Ψ *Reino Virolainen* *Ari Julin*	# 099 Consequence Modelling of Accidents in Hazardous Substances Transportation Ψ *Ales Bernatik* *William Zimmerman* *Michail Senovsky*	
	# 198 Research on Method of Sample Size Determination for Reliability Test Design of Aeronautical Mechanical Products *Bozhi Guo* *Weimin Cui* Ψ *(Faguo Sun)* *et al.*	# 481 Ontology Building for the Cognitive Task Analysis of Disaster Nursing Ψ *Taro Kanno* *Kimiko Hayano* *Chie Ishida* *et al.*	# 134 Reliability, Availability and Risk Evaluation of Systems in Variable Operation Conditions Ψ *Joanna Soszynska*	# 320 Approaching Vulnerability in Socio-technical Emergency Response Systems Ψ *Christian Uhr* *Lars Fredholm*		# 189 Living PSA Documentation Ψ *Johan Sörman* *Lonnie Bullington*	# 466 The Method of Ships Berth Location with Navigational Risk Consideration Ψ *Lucjan Gucma*	
	# 210 IR Filter Bonding Reliability of Camera Module for Mobile Phone Ψ *Yang Ho Moon* *Hee Seong Choi* *Seung Su Park*	# 199 Fuzzy Hierarchical Modeling for Business Environment Scanning and Decision Making Ψ *Yu-Shu Hu* *Mohammad Modarres*	# 444 A New Risk Assessment Frame Work for Cypriot Manufacturing Units Based on Stochastic Analysis (the Gregoriou Industry Case Study) Ψ *Georgios Boustras* *Romaios Bratskas* *Alexandros Michaelides*	# 426 Resilience Analysis of Civil Defence Organization: a Fuzzy Cognitive Map Based Approach Ψ *Ottavio Grande* *Paolo Trucco*		# 479 Level 1 and Level 2 Internal Events PSA Accident Sequence Quantification for Point Lepreau Refurbishment Project Ψ *Shakit Sawh* *Maria Wei* *L. Comanescu*	# 095 Statistical Analysis of Aairline Passengers' Perceived Accident Risk *Wei-Ting Lee* Ψ *Li-Yen Chang*	

	A-11 Reliability Methods and Applications IV	B-11 Testing, Statistical Methods and Analysis	C-11 Level 2 PSA of Nuclear Power Plants I	D-11 Human Behavior & Risk_IV: Cognitive Processes in safety	E-11 Offshore PSA Applications	F-11 PSA Applications IV: Nuclear Systems	G-11 Safety Standards and Safety Goals I
	Andreas Efstathiades					*et al.*	
1200~1330	Lunch Break						
	Christophe Berenguer **Ji Hwan Cha**	**Heinz Peter Berg**	**Reino Virolainen** **Attila Bareith**	**Paolo Trucco** **Joan Havery**	**Andrew Hale** **Jan Erik Vinnem**	**George Apostolakis** **Cornelia Spitzer**	**John Monninger** **Joon-Eon Yang**
	# 089 Contribution to Modeling of Complex Systems Reliability *Zdenek Vintr Miroslav Koucky* Ψ *David Valis*	# 435 Statistical Method for Determination of Safe Pilot System Interface Ψ *Maciej Gucma*	# 125 Analysis of Accident Progression and Source Term in Level-2 PSA for the Shutdown Period Ψ *Susumu Sumida Kyoko Funayama Mitsuhiro Kajimoto*	# 246 Gut Feeling vs. Common Sense: Associative and Cognitive Processes in Risk Perception and Communication Ψ *Vivianne H.M. Visschers Ree M. Meertens*	# 293 Safety of DP Drilling Operations in the South China Sea Ψ *Haibo Chen Torgeir Moan*	# 181 Living PSA Development for RBMK Units 1 and 2 of Leningrad NPP Ψ *M. Lehto T. Mankamo G. Johanson*	# 011 The Dutch Industrial and Flood Safety Policies: a Comparative Study Ψ *R.B. Jongejan B.J.M. Ale*
	# 090 Phenomena of a Failure Ψ *David Valis Lisa M. Bartlett*	# 064 Statistical Analysis of Glovebox Glove Failures in a Nuclear Facility Ψ *Michael E. Cournoyer Daniel S. Borrego Stephen Schreiber Young H. Park*	# 170 The Development of Simplified LERF Estimation Model of ABWR *Chun-Chang Chao Meng-Chi Chen* Ψ *Jyh-Der Lin*	# 317 A Study on Communication Modality to Support Mode Awareness: Examining Driver's Awareness of Mode of Driving Support System Ψ *Yukio Horiguchi Takanori Suzuki Hiroaki Nakanishi Tetsuo Sawaragi*	# 356 Marine Risk Quantification for Sub-Sea Pipeline Impact Ψ *Anand Pillay Chua Siew Wen*	# 192 Probabilistic Risk Analysis of Reactor Pressure Vessels Ψ *Wen-Fang Wu Jang-Shyong You Chung-Hao Wei Hou-Chin Chu*	# 067 Safety Standards, Software and Improved Development of Safety Equipment Ψ *Thor Myklebust*
1330~1500	# 023 On Reliability Improvement of Series-Parallel System with Components Quantitative and Qualitative Redundancy Ψ *Bozena Kwiatuszewska-Sarnecka*	# 191 Statistical Analysis on the Causes of Accidents in Japanese Chemical Industries Ψ *Hideo Ohtani*	# 227 Method for Examination of Accidental Sequences with Multiple Containment Failure Modes in the French 900 MWe PWR Level 2 PSA Ψ *Marc Villermain E. Raimond K. Chevalier et al.*	# 154 Toward Information Management for Reducing "Damage Caused by Rumors" Ψ *Makoto Itoh*	# 049 Challenges in Analyzing Offshore Hazards of an Operational Nature Ψ *Jan Erik Vinnem*	# 197 Performance of a German Seismic PRA for Nuclear Power Plants by Using Safety Margins Ψ *Ralf Obenland Theodor Bloem Wolfgang Tietsch*	# 428 Consistency of Judgement in the Usage of Probabilistic Safety Goals Ψ *Michael Knochenhauer Jan-Erik Holmberg Helena Gustavsson*
	# 371 Failure Mechanisms of Stainless Steel Membrane for the Cryogenic LNG Storage Tanks Ψ *James C. Lin Wangwen Zhao*		# 289 Radiation Source Terms Assessment for Identifying Correlations Between LERF and Early Fatality *Kyungmin Kang* Ψ *Moosung Jae Young Ho Jin*	# 458 Managing Knowledge to Improve Industrial Safety Ψ *Bruno Debray Amjad Abou Assali Dominique Lenne*	# 062 On the Risk to Personnel in the Offshore Industry Ψ *Jan Erik Vinnem*	# 247 Protection of Nuclear Power Plants against Flooding - Considerations for the Determination of a 10.000 Years Return Period Flood between Tidal and Inland River Regimes Ψ *Torsten Frank Jürgen Jensen Christoph Mudersbach et al.*	# 476 The Development of PRA Quality Standards and Use in Risk-Informed Decision-Making *Mary Drouin* Ψ *John Monninger*
	# 256 Optimisation of Structural Systems by Appropriately Assigning Probabilities of Failure. Application to Rubble Mound Breakwaters					# 412 Preliminary Probabilistic Safety Assessment of Chinese Dual Functional Lithium Lead Test Blanket Module System for ITER	

	Ψ *Nguyen Dai Viet* *H.J. Verhagen* *P.H.A.J.M van Gelder* *J.K. Vrijling*				Ψ *Y.Wu* *L.Hu* *Y.Li* *et al.*		
1500~1520	**Coffee/Refreshment Break**						

PSAM9 Program Summary

	A-12 **Reliability Methods and Applications V: Binary Digit Diagrams**	B-12 **Safety Assessment Approaches**	C-12 **Level 2 PSA of Nuclear Power Plants II**	D-12 **Human Behavior & Risk V: Organizational Culture and its Impacts on Safety**	E-12 **PSA Methods and Tools I**	F-12 **PSA Applications V**	G-12 **Safety Standards and Safety Goals II**	
	Enrico Zio	**Tsu-Mu Kao**	**David Johnson**	**Paolo Trucco** **Joan Harvey**	**Toivo Kivirnta**	**James C. Lin**	**Nattasha Freeman** **Jeanne-Marie Lanore**	
1520~1650	# 124 Practical Top Event Probability Calculation by BDD Truncation Algorithm Ψ *Woo Sik Jung* *Joon-Eon Yang* *Ken Canavan*	# 230 Development and Validation of a Comprehensive Hybrid Causal Model for Safety Assessment and Management of Aviation Systems *Alfred Roelen* Ψ *Rombout Wever* *Ali Mosleh* *Katrina Groth*	# 367 Comparison of Different Approaches for Modelling Level 2 PSA Ψ *Guesmia Mustapha* *Gallois Marie* *Pau Jean-Michel*	# 386 Organisational Culture and Effect Sizes Ψ *Charles Johnson*	# 129 Integrated Common Cause Component Group Analysis of Diverse and Highly Redundant Release Systems of RBMK Control Rods Ψ *Andreas Wielenberg* *H. Schaefer* *T. Mankamo*	# 033 Probabilistic Risk Assessment for Spent Fuel Pool Decommissioning in the J. Bohunice V1 NPP Ψ *Zoltan Kovacs* *Robert Spenlinger* *Helena Novakova*	# 469 The Next Generation of Ssafety Standards – Wishful Thinking? Ψ *Odd Nordland*	
	# 368 Evaluating Network Reliability versus Topology by Means of BDD Algorithms *A. Bobbio* *R. Terruggia* *E. Ciancamerla* Ψ *M. Minichino*	# 353 Testing the Untestable: towards a Pro-active Safety Assessment Ψ *John Stoop* *Jaap Vleugel* *John Baggen*	# 443 Criteria for Assessment of Results from Level 2 PSA Ψ *Jan-Erik Holmberg* *Michael Knochenhauer* *Jukka Rossi*	# 249 Modeling of Human and Organizational Impacts for System Risk Analyses Ψ *Léger Aurélie* *Duval Carole* *Farret Régis* *et al.*	# 225 The POS Model For Common Cause Failure Quantification: Progress In Parameter Estimation And Comprehensive Documentation *Rudolf Görtz* Ψ *Heinz P. Berg* *Jan Mahlke*	# 098 Pilot Study on Loss of Offsite Power Frequency and Duration, LOOP Events and PSA Modeling *Erik Sparre* *Gunnar Johanson* Ψ *Helen Bigun*	# 486 Safety Goals – Results from the COOPRA project Ψ *Philippe Hessel*	
	# 413 A New Ordering Heuristic Based on ZBDDs' Cutoff Strategies Ψ *Y. Li* *P. Liu* *H. Wang* *et al.*	# 221 MOCHOVCE WWER 440/V213 Reactor Units 3 and 4 Safety Improvements Based on Original Plant Design Ψ *Ivan Cillik*	# 505 Severe Accident Assessment of NRU Reactor Ψ *R. Leung* *C. Blahnik*	# 282 A Hybrid Technique for Organizational Safety Risk Analysis Ψ *Zahra Mohaghegh* *Reza Kazemi* *Ali Mosleh*	# 498 Consequence Analysis with WinMACCS 3.4 Ψ *Nathan E. Bixler* *Katherine L. McFadden* *Lloyd L. Eubanks* *et al.*	# 213 PSA-study of Internal Flooding Events at Ringhals 2 in Sweden Ψ *Cilla Persson* *Erik Sparre*	# 487 WGRisk Task on Safety Criteria Ψ *Philippe Hessel*	
	# 329 Variable Ordering Heuristics for BDD Based on Minimal Cutsets Ψ *Cristina Ibañez-Llano* *Antoine Rauzy*			# 424 Future Challenges in Plant Safety: beyond the OTS Paradigm *Davide Manca* Ψ *Flavio Manenti*	# 410 Equivalence of New-direct and New-indirect Monte Carlo Methods *L. Campioni* Ψ *P. Vestrucci*	# 287 A Probability Safety Assessment for A Spent Fuel Storage Facility *Jung Hyun Ryu* *Kyungmin Kang* Ψ *Moosung Jae* *Goon-Cherl Park*		
	# 341 One Heuristic to Minimize BDD Representation of the Fault Tree *Reni Banov* Ψ *Zdenko Šimić* *Vladimir Mikuličić*					# 404 Reliability Assessment Basing on Importance Measures Ψ *S. La Rovere* *P. Vestrucci* *M. Sperandii*		

ROOM SESSION	A-13(Harbor 1)	B-13(Harbor 2)	C-13(Camomile)		E-13(Rose)	F-13(Peony)		Kowloon
FRIDAY, 23 MAY 2008								

Venue : The Grand Ballroom

0830~1000	**Plenary Speaker:**	**Dr. Vinh Dang, Paul Scherrer Institute (PSI), Switzerland** *Quantifying the Human Factor - Time for a Change* **Prof. Wolfgang Kroger, ETH Zurich, Switzerland** *Interdependencies among Technical Systems: the Why, What and How*

1000~1030	**Coffee/Refreshment Break**

ROOM SESSION	A-13 **Reliability Methods and Applications VI**		C-13 **Level 2 PSA of Nuclear Power Plants III**	D-13 **Roundtable Discussion on Human Reliability Analysis Methods and Applications**	E-13 **PSA Methods and Tools II**	F-13 **PSA Applications VI**	
	James C. Lin		**Philippe Hessel** **David Johnson**	**Vinh N. Dang** **Bruce Hallbert**	**Enrico Zio**	**Toshimitsu Homma** **Robin Hirsch**	
1030~1200	**# 046** Operation Reliability and Diagnostics of Mechanical Systems via RDIS Application Ψ *Jiri Stodola* *Petr Stodola*		**# 484** Modelling of High Pressure Phenomena in Level 2 PSA Ψ *Eva-Maria Pauli* *Jürgen Eyink* *Gerben Dirksen*		**# 263** Common Cause Failure Estimation with No CCF Observation *Laurence Dieulle* Ψ *Mitra Fouladirad* *Anne Barros* *et al.*	**# 365** Technical Considerations for Emergency Preparedness with a Probabilistic Accident Consequence Assessment Model Ψ *T. Homma* *M. Kimura* *T. Matsubara* *J. Ishikawa*	
	# 161 A Method to Estimate the Initiating Event Frequency by Monte Carlo Simulation *Li Yuandan* *Tong Jiejuan* Ψ *(Jun Zhao)*		**# 141** Quantification of Event Sequence Chronology Using a Continuous MCMC Method for Level 2 PSA of a Nuclear Power Plant Ψ *Shogo Yabuuchi* *Takashi Takata* *Akira Yamaguchi*		**# 384** Recent Issues and Developments in Burn-in Models Ψ *Ji Hwan Cha*	**# 518** Use of Risk Insights in Support of USNRC Reviews of New Reactor Applications Ψ *Hossein Hamzehee* *Todd Hilsmeier*	
	# 258 Utilization of Importance Measures in the Development, the Optimization and the Justification of Preventive Maintenance Plans Ψ *Isabelle Hendrickx* *Benoit Lance* *Gérald Stubbe* *et al.*		**# 145** An Approach to Quantification of Uncertainties in the Risk of Severe Accidents at Neckarwestheim Unit 1 Nuclear Power Plant and the Risk Impact of Severe Accident Management Measures Ψ *Andreas Strohm* *W. Schwarz* *M. Khatib-Rahbar* *et al.*		**# 298** An Intuitive Method for Reliability Analysis of Dynamic Systems Ψ *Seung Ki Shin* *Gyoung Tae Goh* *Poong Hyun Seong*	**# 517** Derivation Loss of Main Heat Sink Frequency Considering the Operational Experience Ψ *Thomas Oehmgen* *Felix Sassen* *Günter Breiling*	
	# 156 Maintenance Effectiveness Monitor System, MEMOS Ψ *Pi-Lin Hsu*		**# 207** Probabilistic Assessment of the Consequences of Vessel Fragmentation *Gianfilippo Gubinelli*				

(Exhibition — vertical label at right)

Shang-Tzu Ho		*Giacomo Antonioni* Ψ *Valerio Cozzani*					
1200~1330	<td colspan="7" align="center">**Conference Farewell Lunch** **Venue : The Grand Ballroom**</td>						