

W21 Organizational Factors and Safety Culture

Wednesday 9/19/2018 3:50 PM Exploration

Chair: Jinkyun Park

109 Barriers to Proactive Population Relocation in Preparation for Coastal Flooding

Vicki M. Bier

University of Wisconsin-Madison, Madison, Wisconsin, USA

182 Mapping Methodical Change in Safety Culture

Kaupo Viitanen (a), Teemu Reiman (b), Carl Rollenhagen (c), and Nadezhda Gotcheva (d)

a) VTT Technical Research Centre of Finland Ltd, Espoo, Finland, b) Liliikoi Consulting, Lohja, Finland, c) Royal Institute of Technology (KTH), Stockholm, Sweden and Vattenfall AB, Stockholm, Sweden, d) VTT Technical Research Centre of Finland Ltd, Tampere, Finland

194 Safety Culture Assurance in the Supply Chain of a NPP Construction Project

Teemu Reiman (a) and Kaupo Viitanen (b)

a) Fennovoima Oy, Helsinki, Finland, b) VTT Technical Research Centre of Finland Ltd, Espoo, Finland

W22 Prognostics & System Health Management II

Wednesday 9/19/2018 3:50 PM Discovery

Chair: M. Pourgol-Mohammad

301 Fusing More Frequent and Accurate Structural Damage Information from One Location to Assess Damage at another Location with Less Information

Roohollah Heidary, Katrina M. Groth, and Mohammad Modarres

Systems Risk and Reliability Analysis Lab, Center for Risk and Reliability, Department of Mechanical Engineering, University of Maryland, College Park, MD

348 A Significance of Condition-Based Probabilistic Risk Assessment Using Data-At-Scale: A Case Study (Presentation Only)

Vaibhav Yadav, Andrei Gribok, Curtis Smith

Idaho National Laboratory, Idaho, USA

413 A PHM Architecture Based on Hybrid of Model and Data for Electronic Products

Jiamin Liu, Weiwei Hu, and Wenjin Zhang

School of Reliability and System Engineering, Beihang University, Beijing, China

427 Reliability-based Approach to the Assessment of Hydrate Formation Probability in Deep-sea Wet-gas Pipelines

Chaoyu Ruan, Zhiqiang Hou, Xin Lu (a), Bohui Shi (b)

a) China Waterborne Transport Research Institute, Beijing, China, b) Technology National Engineering Laboratory for Pipeline Safety, China University of Petroleum-Beijing, Beijing China

W23 Dynamic PSA/PRA III

Wednesday 9/19/2018 3:50 PM Illumination

Chair: Zachary Jankovsky

228 Integrating Classical PRA Models Into Dynamic PRA

D. Mandelli, C. Smitha, and A. Alfonsi

Idaho National Laboratory (INL), Idaho Falls (ID), USA

193 Convergence of Varied Surrogate Models for Seismic Dynamic PRA/PSA

Brian Cohn (a), Jieun Hur (b), Richard Denning, Tunc Aldemir (a), Halil Sezen (b)

a) Department of Mechanical and Aerospace Engineering, The Ohio State University Columbus, USA, b) Department of Civil, Environmental and Geodetic Engineering, The Ohio State University Columbus, USA

203 Introduction and Demonstration of the I&AB Quantification Method as Implemented with Risk Spectrum PSA

Ola Bäckström (a), Marc Bouissou (b), Rory Gamble, Pavel Krčál, Johan Sörman and Wei Wang (a)

a) Lloyd's Register, Stockholm, Sweden, b) EDF, Paris, France

207 Modelling Component Failure Rates Utilizing Sensor-Based Degradation Data

Vaibhav Yadav, Vivek Agarwal, Andrei V. Gribok, and Curtis L. Smith

Idaho National Laboratory, Idaho Falls, ID, USA

Program at a Glance

Overview

PSAM 14

- 

Chair: Reza Kazemi

- Chair: Yang Wang*

- 337 **Determination of the Storage Number of LPG Tank Container Based on Quantitative Risk Analysis**
 Qing Xia, Jian Guo, Haiqi Tang and Hualing Wu
China Waterborne Transport Research Institute, Beijing, China

410 **Research on Application of Holographic Navigation Marks in the Upper Reaches of Yangtze River**
 Geng Jiezha, Hu Yuchang, Jiang Lili, Han Chao
China Waterborne Transport Research Institute, Beijing, China

362 **Discussion on Container Dangerous Goods Stockpile Management Based on Quantitative Risk Assessment**
 Zhijun Chen, Yuan Gao (a), Hong Fan (b), Qing Xia, Haiqi Tang, Yafei Zhou (a)
a) China Waterborne Transport Institute, b) Beijing Transport Safety and Health Technical Consultation Institute

422 **Construction of Safety Risk Management Platform for Storage Tank Concentration Zone in the Port Area**
 Yuchang Hu, Liansheng Xu, Tiansheng Xie, Fengyun Chen, Lili Jiang, Baoqing Zhou
China Waterborne Transport Research Institute, Beijing, China

W27 Resilience Engineering

Wednesday 9/19/2018 3:50 PM Laureatte

Chair: John Andrews

10 **A Comparative Study of Risk and Resilience and Their Affiliation in Maritime Safety Research**

Tengfei Wang (a,b,c), Yang Wang (a,b), Shanshan Fu (a,b,d) and Bing Wu (a,b)

a) Intelligent Transportation System Research Center, Wuhan University of Technology, Wuhan Hubei, China, b) National Engineering Research Center for Water Transport Safety, Wuhan Hubei, China, c) School of Logistics Engineering, Wuhan University of Technology, Wuhan Hubei, China, and d) College of Ocean Science and Engineering, Shanghai Maritime University, Shanghai, China

172 **The Model of Resilience in Situation: Its Contribution to the Crisis Management Analysis and Improvement**

P. Le Bot, C. De la Garza, Q. Baudard

EDF R&D, Palaiseau, France

330 **Building Critical Infrastructure Resilience – Cross-Sectoral Comparison of Vital Operational Tasks and Practices**

Miltos Kyriakidis (a), Vinh N. Dang, and Stefan Hirschberg (b)

a) ETH Zurich, Future Resilient Systems, Singapore-ETH Centre, Singapore, b) Laboratory for Energy Systems Analysis, Paul Scherrer Institute, Switzerland

385 **Improving Community Resilience through Post-Disaster Temporary Housing Optimization**

Daniel V. Perrucci and Hiba Baroud

Vanderbilt University, Department of Civil Engineering, Nashville, USA