

Th11 External Events and Multi-Unit HRA

Thursday 9/20/2018 1:30 PM Exploration

Chair: Jinkyun Park

- 341 **Human Reliability Analysis (HRA) Methodologies used in the Canadian Probabilistic Safety Assessment (PSA) for External Events**
Hayat Chatri, Smain Yalaoui, and Yolande Akl
Canadian Nuclear Safety Commission, Ottawa, Canada
- 226 **Analysis of Human-Induced Initiating Events in the LOOP Scenario**
Awwal Mohammed Arigi, Jooyoung Park, and Jonghyun Kim
Department of Nuclear Engineering, Chosun University, Gwangju, Republic of Korea
- 236 **An Approach to Human Reliability Analysis for the Multi-Unit PSA**
Jooyoung Park, Awwal Mohammed Arigi, and Jonghyun Kim
Department of Nuclear Engineering, Chosun University, 309 Pilmun-daero, Dong-gu, Gwangju 501-709, Republic of Korea

Th12 Maritime and Offshore Technology II

Thursday 9/20/2018 1:30 PM Discovery

Chair: Ingrid Utne

- 404 **A Signal Detection Model to Interpret Safety Tests in Offshore Oil Drilling**
Maryam Tabibzadeh (a), Detlof von Winterfeldt, and Najmedin Meshkati (b)
a) California State University, Northridge, Northridge, USA, b) University of Southern California, Los Angeles, USA
- 420 **A Case Study to Analyze Negative Pressure Test Interpretation in Offshore Drilling: Utilizing a Signal Detection Model**
Maryam Tabibzadeh (a), Detlof von Winterfeldt and Najmedin Meshkati (b)
a) California State University, Northridge, Northridge, USA, b) University of Southern California, Los Angeles, USA
- 254 **Modeling the Risk of U.S. Offshore Oil & Gas Exploration-Well Drilling, Commercial Nuclear Plants, and Human Spaceflight**
Roger L. Boyer, Robert B. Cross (a), Forrest E. Shanks, Michael Worden (b), and Robert Youngblood (c)
a) NASA Johnson Space Center, Houston, U.S.A., b) Bureau of Safety and Environmental Enforcement, Houston, USA, c) Idaho National Laboratory, Idaho Falls, USA

Th13 Consequence Modeling and Management II

Thursday 9/20/2018 1:30 PM Illumination

Chair: Claudia Vivalda

- 284 **Korean Ingestion Dose Assessment Model for Level 3 PSA**
Dong-Kwon Keum, In Jun, Kwang-Muk Lim, Yong-Ho Choi, Hyo-Joon Jeong, Seok-Jung Han
Korea Atomic Energy Research Institute (KAERI), Daejeon, Republic of Korea
- 350 **Optimization of Disaster Restoration Plan for Water Supply System using a High-Fidelity Restoration Process Simulation and Genetic Algorithm**
Shungo Koike (a), Taro Kanno (b), Yuji Kawase (c), Hiroyuki Takahashi (d), and Kazuo Furuta (e)
a,b,e) Graduate School of Engineering, The University of Tokyo, Tokyo, Japan, c,d) METAWATER Co., Ltd., Tokyo, Japan
- 119 **The Latest Thinking of SMRs Impact on the Environment - A Probabilistic Approach**
Bernat Cirera, Lavinia Raganelli and Hugh Stephenson
Corporate Risk Associates, London, United Kingdom

Program at a Glance

Overview

PSAM 14

Chair: Kim Minkyu

- Chair: Roger Boyer*

- 281 **Synthesizing a New Launch Vehicle Failure Probability Based on Historical Flight Data**
Robert B. Cross (a), William E. Vesely (b)
a) NASA Johnson Space Center, Houston, USA, b) NASA, Retired, Arlington, VA, USA

421 **A Bayesian Analysis of the Risk of Satellite Collisions and of Space Surveillance Improvements**
M-Elisabeth Paté-Cornell and Richard Kim
Management Science and Engineering, Stanford University

411 **Launch Vehicle Reliability and Risk Metrics Definition and Estimation in Relation to Requirements**
Sergio Guarro
The Aerospace Corporation, El Segundo, California, USA