Symposium Schedule

August 25, 2015

	STSS	ISSNP
11:00-	Registration Desk Open (Corridor between Room314 and Room315)	
12:50-13:00	Opening Remark (Room315)	
13:00-14:00	Keynote 1 (Room315)	
14:00-15:00	Keynote 2 (Room315)	
15:00-15:30	Break	
15:30-17:30	STSS Session1(Room314) Human/Social Factors and Community Support	ISSNP Session1 (Room315) Protection Systems

August 26, 2015

	STSS	ISSNP
9:00-	Registration Desk Open (Corridor between Room314 and Room315)	
10:00-11:30 (STSS) 9:30-11:30 (ISSNP)	STSS Session2 (Room314) Skill Succession and Training	ISSNP Session2 (Room315) Training and Operation Procedure
11:30-13:00	Break	
13:00-14:00	Keynote 3 (Room315)	
14:00-14:30	Break	
14:30-16:10	STSS Session3 (Room314) Visualization and Energy Saving	ISSNP Session3 (Room315) Analyses and Monitoring of Risks
16:10-16:30	Break	
16:30-17:40	Plenary (Room315)	
18:30-	Banquet (Ganko Takasegawa Nijoen)	

August 27, 2015

	STSS	ISSNP
9:00-	Registration Desk Open (Corridor between Room314 and Room315)	
9:30-11:30	STSS Session4 (Room314) Media Communication	ISSNP Session4 (Room315) Experimental Studies for Nuclear Safety
11:30-13:00	Break	
13:00-14:00	Keynote 4 (Room315)	
14:00-15:00	Keynote 5 (Room315)	
15:00-15:30	Break	
15:30-17:10	STSS Session5 (Room314) Awareness	ISSNP Session5 (Room315) Diagnosis and Assessment

August 28, 2015

	STSS	ISSNP
9:00-	Registration Desk Open (Corridor between Room314 and Room315)	
9:30-11:30	STSS Session6 (Room314) Risk Engineering and System Modelling	ISSNP Session6 (Room315) Computational Fluid Dynamics and Safety Analysis
11:30-13:00	Break	
13:00-14:00	Keynote 6 (Room315)	
14:00-14:30	Break	
14:30-17:00	STSS Session7 (Room314) Input/Output Method	ISSNP Session7 (Room315) Functional Modeling and Optimal Management

Symposium Program Day1 (August 25, 2015)

	Keynote1
13:00-14:00 (Room315)	**Study on Local Thermal-hydraulic Performance, Optimization and Fabrication of Printed Circuit Heat Exchanger under High Temperature Conditions** Prof. Yitung Chen (Department of Mechanical Engineering, University of Nevada Las Vegas)

	Keynote2
14:00-15:00 (Room315)	**From Being there without going to Natural Interactive Walking and back** Prof. Rolf Nordahl (Department of Architecture, Design and Media Technology, Aalborg University, Denmark)

	STSS2015 Session1 Human/Social Factors and Community Support
15:30-17:30 (Room314)	• **Proposal and evaluation of a method to induce a chat leading to organizational learning** *Motoki Urayama (Kyoto University, Japan), Takayoshi Kitamura (Kyoto University , Japan; present Ritsumeikan University, Japan), Daisuke Kamihigashi, Hirotake Ishii, Hiroshi Sshimoda (Kyoto University, Japan), Hidenori Fujino (Fukui Prefecture University, Japan)* • **Group discussion support systems design based on the impression evaluation measurement by the introduction of imitator** *Akira Wada, Kyoko Ito, Shogo Nishida (Osaka University, Japan)* • **Case study of an issue at JAEA Ningyo-toge on communication with local stakeholders** *Hiroshi Miyagawa, Yuu Ishimori (Japan Atomic Energy Agency, Japan)* • **Preventing Accidents Caused by Unintended Sudden Acceleration and Subsequent Continuous Acceleration in Automatic Transmission Vehicles** *Ichiro Ono, Kazunori Shidoji (Kyushu University, Japan)*

	ISSNP2015 Session1 Protection Systems
15:30-17:30 (Room315)	• **Optimization of the Nuclear Plant Protection System against Common Cause Failures** *Jongwook Shin, Jaecheon Jung (KEPCO International Nuclear Graduate School, Korea)* • **An Integrated Platform for Analysis and Design of Physical Protection System at Nuclear Power Plants** *Bowen Zou, Ming Yang, Hongxing Lu, and Hidekazu Yoshikawa (Harbin Engineering University, China)* • **System Engineering Approach for Development of Safety Protection System for NPPs** *Zulhelmi Zulkifly, Jung Jae Cheon (KEPCO International Nuclear Graduate School, Korea)* • **A Systematic Approach to FPGA Design Methodology for Reactor Protection System** *Ahmed Ibrahim, Jaecheon Jung (KEPCO International Nuclear Graduate School, Korea)* • **Methodology Study on Life Prediction of Main Pumps in Nuclear Power Plants** *Hongxing Lu, Ming Yang, Hidekazu Yoshikawa, and Xinyu Dai (Harbin Engineering University, China)*

Symposium Program Day2 (August 26, 2015)

	STSS2015 Session2 Skill Succession and Training		ISSNP2015 Session2 Training and Operation Procedure
10:00-11:30 (Room314)	• **Suggestion of Eye Tracking Learning Software Using a Low Cost Edition of Eye Tracker** *Fumihito Ito, Mitsuhiro Yokota, Masahiko Nawate (Shimane University, Japan), Satoshi Kikuta (Ministry of Education, Sri Lanka)* • **Application of VR and AR to the Knowledge Management for the Decommissioning of Nuclear Facilities** *Yukihiro Iguchi, Satoshi Yanagihara, Yasuaki Kato (University of Fukui, Japan)* • **Comparative Study on Linear and Non-Linear Safety Analyses for Train Operation and Maneuvering** *Keisuke Fukuda (West Japan Railway Company, Japan), Tetsuo Sawaragi, Yukio Horiguchi, Hiroaki Nakanishi (Kyoto University, Japan)*	9:30-11:30 (Room315)	• **Development of Nuclear Power Plant Simulator for Personal Learning** *Odagawa Naoto, Koizumi Atsuhiko, Kato Takahisa, Miyamoto Chikashi, and Yonezawa Hisanori (Toshiba Corporation Power Systems Company, Japan)* • **Crew Resource Management Training Adapted to Nuclear Power Plant Operators for Enhancing Safety Attitude** *Akira Ishibashi (Safety Management Lab. Co.,LTD., Japan), Masaharu Kitamura (Research Institute for Technology Management Strategy Co.,LTD., Japan), Makoto Takashi (Tohoku University, Japan)* • **A study on operation strategy of containment spray system and containment filtered venting system for the minimization of radioactive material release under station black out** *Jaehyun Ham, Hyun Gook Kang, Soon Heung Chang (KAIST, Korea)* • **Analytical study to develop operation strategy of H-SIT in SBO accident** *In Seop Jeon, Hyun Gook Kang (KAIST, Korea)* • **Experimental investigation of Information in operation manual required for beginners of plant operation** *Takashi Matsubara, Akio Gofuku, Taro Sugihara (Okayama University, Japan)*

	Keynote3
13:00-14:00 (Room315)	**Plant Life Time of Nuclear Power Plants and Regulatory Limit in Japan** **Prof. Toshiyuki Takagi*, Prof. Takayuki Aoki**** **(*Institute of Fluid Science, Tohoku University, Japan. **Graduate School of Engineering, Tohoku University, Japan)**

	STSS2015 Session3 Visualization and Energy Saving		ISSNP2015 Session3 Analyses and Monitoring of Risks
14:30-16:10 (Room314)	• **Objective and Quantitative Evaluation of Intellectual Productivity under Control of Room Airflow** *Shota Shimonaka, Yuta Shimamura, Masanari Furuta, Kazune Miyagi, Hirotake Ishii, Hiroshi Shimoda (Kyoto University, Japan), Kazuhiro Taniguchi (Panasonic Ecology Systems Co., Ltd., Japan), Fumiaki Obayashi (Panasonic Corporation Eco Solutions company, Japan)* • **Process Visualization of In-trail Spacing Tasks in En-route Air Traffic Control** *Daisuke Karikawa, Hisae Aoyama (Electronic Navigation Research Institute, Japan)* • **Visualizing Running Time Constraint for Driver Adaptation to Punctual Train Operation** *Yukio Horiguchi, Hiroaki Kudo, Tetsuo Sawaragi, Hiroaki Nakanishi (Kyoto University, Japan)* • **Human Factors in Office Environment for Energy Saving: Exploratory Study in an Energy Test Facility** *Chih-Wei Yang, Li-Chen Yang, Tsung-Chieh Cheng (Institute of Nuclear Energy Research, Taiwan)*	14:30-16:10 (Room315)	• **What should be level 5 defense layer in post-Fukushima nuclear safety** *Hidekazu Yoshikawa (Symbio Community Forum, Japan; Harbin Engineering University, China), Ming Yang, Zhijian Zhang (Harbin Engineering University, China)* • **Analysis about the relationship between risk perception and willingness to pay about nuclear power plant** *Mirae Yun, Sang Hum Lee, Hyun Gook Kang (KAIST, Korea)* • **Transition of the Mission Success Probability with the Progression of Nuclear Power Plant Accident** *Takeshi Matsuoka (Harbin Engineering University, China; Utsunomiya University, Japan)* • **Design of a Platform for Hierarchical Modeling of GO-FLOW Models** *Xinyu Dai, Ming Yang, Hongxing Lu, and Zou Bowen (Harbin Engineering University, China)*

	Plenary Talk
16:30-17:40 (Room315)	**Omoide Engineering - social use of personal memories -** **Prof. Yoshio Nakatani** **(Ritsumeikan University, Japan)**

Symposium Program Day3 (August 27, 2015)

	STSS2015 Session4 Media Communication
9:30-11:30 (Room314)	• **A Case study of Method to Activate and Continue Online Community for Promoting Pro-Environmental Behaviors** *Takayoshi Kitamura (Kyoto University, present, Ritsumeikan University, Japan), Kouki Inoue (Kyoto University, Japan, present, Chubu Electric Power, Japan+C51), Daisuke Kamihigashi, Hirotake Ishii, Hiroshi Shimoda (Kyoto University, Japan)* • **Eye-Gaze Interaction Design for Sharing the Context with Third Person of Conversation** *Genki Takahashi, Yugo Takeuchi (Shizuoka University, Japan)* • **Emergence of Sympathy between Human and Agent through Comparable motions** *Shusaku Kumazaki, Yugo Takeuchi (Shizuoka University, Japan)* • **Facial Expression Recognition for Evaluating QoL of Dementia Patients** *Syoichiro Sako, Kazuaki Kondo, Yuichi Nakamura (Kyoto University, Japan), Yoshiaki Matsuoka (Aino University), Tomotake Ohtsuka (Nishikagawa Hospital, Japan)*

	ISSNP2015 Session4 Experimental Studies for Nuclear Safety
9:30-11:30 (Room315)	• **An experimental study of the slug flow in a vertical narrow rectangular channel** *Yang Wang, Chang-qi Yan, Li-cheng Sun (Harbin Engineering University, China)* • **Experimental study of bubble nucleation site density in a narrow rectangular channel under subcooled flow boiling condition** *Li Shaodan (Wuhan Second Ship Design & Research Institute, China), Tan Sichao (Harbin Engineering University, China), Lin Yuansheng (Wuhan Second Ship Design & Research Institute, China), Li Yong (Wuhan Second Ship Design & Research Institute, China)* • **Research on the Pressure Characteristic of Self-priming Venturi Scrubber's Suction Nozzle** *Zhuang Miao, Zhongning Sun, Yanmin Zhou (Harbin Engineering University, China)* • **Experimental study on sodium droplet combustion characteristics** *Chong-chong Liu, Zhi-gang Zhang, Yan-yu Qiao, Zhi Yang (Harbin Engineering University, China)* • **Developing Dynamic Integration Test Facilities and Procedures for Validating Safety Functions during Pre-Operational Phases of the Advanced Nuclear Power Plant** *Chih-Wei Yang, Tsung-Chieh Cheng, Hsiang-Yu Weng (Institute of Nuclear Energy Research, Taiwan)*

	Keynote4
13:00- 14:00 (Room315)	**Is it possible to simulate an outage with the point of view of operation activities?** **Dr. Francois Dionis, Dr. Anne-Sophie Hintzy** **(EDF/R&D STEP Dept., I&C Group, France)**

	Keynote5
14:00- 15:00 (Room315)	**Proactive Plant Life Management for Safe Nuclear Energy** **Prof. Zhengcao Li** **(School of Materials Science and Engineering, Tsinghua University, Beijing, China)**

	STSS2015 Session5 Awareness
15:30- 17:10 (Room314)	• **A study on a computer supported system for awareness of ""specialization"" toward interdisciplinary communication education** *Tadashi Fujii, Kyoko Ito, Shogo Nishida (Osaka University, Japan)* • **Plant Operation HMI with Case Study for Transient State Forecast by Mirror Plant System** *Ryosuke Kashiwa, Emiko Hatsugai, Makoto Nakaya (Yokogawa Electric Corp., Japan)* • **An efficient scheduling system for ad hoc face-to-face conversation** *Takaaki Konaka, Kazuyoshi Murata, Yu Shibuya (Kyoto Institute of Technology, Japan)* • **A System of Supporting Prior Startup while Taking into Account the Internal and External Factors Causing Tardiness** *Hiroshi Tsuda, Kazuyoshi Murata, Yu Shibuya (Kyoto Institute of Technology, Japan)*

	ISSNP2015 Session5 Diagnosis and Assessment
15:30- 17:10 (Room315)	• **Performance of aerosol collection in the venturi scrubber working in self-priming mode** *Yanmin Zhou, Zhongning Sun, Zhuang Miao (Harbin Engineering University, China)* • **Radiological Impact Assessment of a Pyroprocessing Facility in South Korea** *Robby Christian, Hyun Gook Kang (KAIST, Korea)* • **Research on Post Nonlinear Geometric Algorithm for BSS of Mixed Vibration Simulation Signals from the Impeller Pumps** *Sun Shi-yan, Xia Hong, Chen Zhi-hui, Yang Bo, and Liu Mei-ru (Harbin Engineering University, China)* • **Pipe Wall Thinning Detection and Sensitivity Investigation of Longitudinal Guided Wave Using EMAT Guided Wave Testing System** *Akinori Furusawa, Atsushi Morikawa, Fumio Kojima (Kobe University, Japan)*

Symposium Program Day4 (August 28, 2015)

	STSS2015 Session6 Risk Engineering and System Modelling
9:30-11:30 (Room314)	• **Development of Collision Accident Scenario during Nuclear Spent Fuel Maritime Transportation** *Min Yoo, Hyun Gook Kang (KAIST, Korea)* • **Application of new hazard analysis model for embedded systems** *Shigeru Kanemoto, Shunsuke Ootomo (The University of Aizu, Japan)* • **Control and Prognostics of Accelerator's Anode Voltage Regulator Based on Empirical Modelling Approach** *Robby Christian (KAIST, Korea), Balza Achmad (Gadjah Mada University, Indonesia), Hyun Gook KANG (KAIST, Korea)* • **Mechanism study of eddy current testing signals change caused by fatigue crack closure** *XiaoYang Wu, Tetsuya Uchimoto, Toshiyuki Takagi, Ryoichi Urayama, Hao Feng (Tohoku University, Japan)*

	ISSNP2015 Session6 Computational Fluid Dynamics and Safety Analysis
9:30-11:30 (Room315)	• **A Hybrid Method for One-dimensional Compressible Flow and its Verification** *Jie Wang, Ming Ding (Harbin Engineering University, China)* • **Parallel Computation of Core Thermal Hydraulic For a Pressurized Water Reactor** *Ya-feng Wang, Zhao-fei Tian, Lei Li, and Guang-liang Cheng (Harbin Engineering University, China)* • **A Study of Invasive RCS Depressurization Strategy using a squib valve for IPSS-OPR1000** *Jihee Kim (KAIST, Korea), Soon Heung Chang (Handong Global University, Korea), Hyun Gook Kang (KAIST, Korea)* • **Simulation Research on Thermal-Hydraulic Characteristics of Concentric Annuli Tube Once-Through Steam Generator** *Zhao Ya-nan, Peng Min-jun, Xia Geng-lei, Li Ren (Harbin Engineering University, China)* • **Development of graphical software for RELAP5** *Hao-ran Ju, Zhao-fei Tian, Ya-feng Wang, and Gang-ping Shang (Harbin Engineering University, China)*

	Keynote6
13:00- 14:00 (Room315)	**Research and Development for next Generation Nuclear I&C Systems - Requirements, Challenges, and Opportunities** **Prof. Jin Jiang** **(Department of Electrical & Computer Engineering, University of Western Ontario, Canada)**

	STSS2015 Session7 Input/Output Method
14:30- 17:00 (Room314)	• **Multi-Push Display: Functional Extension to Three-point Push** *Takashi Nagamatsu, Masahiro Nakane, Teruhiko Akazawa, Junzo Kamahara (Kobe University, Japan)* • **LuminantCube: Omnidirectional and Auto-stereoscopic 3D Display using Diffusion of Laser-light within a Micro Region** *Takuya Fujii, Ryuta Endo, Yoshiki Ohashi, Hirotake Ishii, Hiroshi Shimoda (Kyoto University, Japan)* • **Transmitting muscle activities from trainer to trainee using sEMG measurement and its display via audio and vibration** *Natsumi Kokubo, Kazuaki Kondo, Yuichi Nakamuea, Junichi Akita, Masashi Toda (Kumamoto University, Japan), Shigeru Sakurazawa (Future University-Hakodate, Japan)* • **Human Pointing Modeling for Improving Visual Pointing System Design** *Kazuaki Kondo, Yuichi Nakamura, Keisuke Yasuzawa, Hiromasa Yoshimoto, Takahiro Koizumi (Kyoto University)* • **Development of application to extract ambiguous words according to disambiguation model in reading English as second language** *Naoaki Takahashi (University of Tsukuba, Japan)* • **Evaluation and Improvement of a Relocalization Method for Camera Tracking in Nuclear Power Plants** *Taro Kimura, Hiroki Tokumaru, Hirotake Ishii, Hiroshi Shimoda (Kyoto University, Japan), Yuta Kouda (Japan Atomic Energy Agency, Japan)*

	ISSNP2015 Session7 Functional Modeling and Optimal Management
14:30- 17:00 (Room315)	• **Application of Multilevel Flow Models to Fault Diagnosis of HTR-PM with Causal Dependency Matrix** *Zhou Yangping, Dong Yujie, Zhang Yong, Shi Lei, Huang Xiaojin (Tsinghua University, China)* • **Study on Emergency Operating Procedures Implementation Support by Multilevel Flow Models** *Yu-xin Zhang, Shan-shan Chen, Meng-chu Song, and Ming Yang (Harbin Engineering University, China)* • **A technique to generate plausible operating procedure for an emergency situation based on a functional model** *Takahisa Inoue, Akio Gofuku, Taro Sugihara (Okayama University, Japan)* • **Nuclear Issues Evaluation based on Rational Risk-Benefit Consideration** *Hiroshi Ujita (The Canon Institute for Global Studies, Japan)* • **Small modular reactors based off-grid zero-emission power system** *Ge Wang, Qi Zhang (China University of Petroleum-Beijing, China)*