

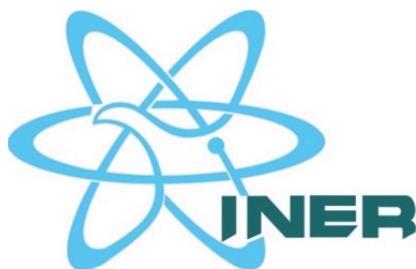
5th East Asia Forum on Radwaste Management

October 25-28 ,2015

Hosted by Chung-Hwa Nuclear Society
at Windsor Hotel, Taichung City, Taiwan.

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EAFORM - EAST ASIA FORUM ON RADWASTE MANAGEMENT

East Asia Forum On Radwaste Management is an international platform organized by the radwaste management related organizations in east Asia area as the principle member and Sandia National Lab. as the supporting member.

EAFORM MANAGEMENT COMMITTEE

The EAFORM Management Committee is organized by members recommended by the principal member of EAFORM. It responsible for the overall direction and top-level management of EAFORM - to define its mission, develop strategic direction and goals for future meetings.

Management Committee Members

Ching-Tsuen Huang, Chung-Hwa Nuclear Society (CHNS)

Tsong-Yang Wei, Institute of Nuclear Energy Research (INER)

Motoi Kawanishi, Central Research Institute of Electric Power Industry (CRIEPI)

Mitsuo Takeuchi, Nuclear Waste Management Organization of Japan (NUMO)

Minoru Emori, Radioactive Waste Management Funding & Res. Center (RWMC)

Gouan Ye, China Institute of Atomic Energy (CIAE)

Lixin Shen, China Nuclear Society (CNS)

Zhang Hua, China Nuclear Society (CNS)

Jong-In Lee, Korea Radioactive Waste Agency (KORAD)

Russell Chris Camphouse, Sandia National Laboratories (SNL)

5th EAFORM Executive Committee

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Secretary in charge:

Shih-Chung Cheng, Institute of Nuclear Energy Research (INER)

Secretary:

Yu Chao, Institute of Nuclear Energy Research (INER)

Chin-Chang Shen, Institute of Nuclear Energy Research (INER)

Hsien-Ming Hsiao, Institute of Nuclear Energy Research (INER)

Kuang-Li Chien, Institute of Nuclear Energy Research (INER)

Chao-Chen Hsu, Institute of Nuclear Energy Research (INER)

General Objective

Solutions for safe, secure, and sustainable management of nuclear spent fuels and radioactive wastes are critical to the viability and continuing growth of nuclear power and other peaceful nuclear application. Advanced and associated nuclear energy programs in the East Asian area face such challenges. Although each of these programs has developed its own technology base, implementation strategy and infrastructure, the urgent needs for further technology enhancement on radioactive waste management and implementation of radioactive waste disposal are common to all. International collaboration will definitely benefit all participants by sharing of knowledge and expertise, as well as on other intangible benefits such as public comprehension on safety issues and support of the establishment of repositories. Recognizing these facts, several research organizations in the East Asian area agreed to hold the East Asia Forum on Radwaste Management (EAFORM) to enhance future cooperation. EAFORM is principally opened to all the research organizations and others related to radioactive waste management around the world. The purpose of EAFORM is to promote information exchange, to share knowledge and to encourage international collaboration in a bilateral or multilateral mode.

To strengthen the above EAFORM objectives, the “EAFORM Management Committee” was organized to coordinate the interactions and communications among the institute. EAFORMs have been held biannually since 2006. The 1st EAFORM was held in Taipei (2006), then in Tokyo (2nd, 2008), Gyeongju (3rd, 2010), and Beijing (4th, 2013).

The 5th EAFORM is holding in Taichung, Taiwan on October 25-28, 2015. We are delighted to be the first host for the second round of EAFORM conference, and we acknowledge all supporting agencies and your participation.

Main Topics

1. Radioactive Waste Management Policies, Regulations, and Programs

- 1.1 Radioactive waste management policies, regulations and programs re-encouraged.
- 1.2 Regional or international cooperation activity.
- 1.3 Social and ethical aspects of radioactive wastes management.
- 1.4 Activities and programs on education and training.

2. Radioactive Wastes Treatment

- 2.1 Waste volume reduction and characterization.
- 2.2 Waste treatment, packaging and storage.

3. LLW/ILW Disposal

- 3.1 Disposal Facility Design, Licensing and Construction.
- 3.2 Waste transportation. Safety and operation experience of disposal facility.
- 3.3 Site investigation and evaluation.

4. Spent Nuclear Fuel (SNF) Storage

- 4.1 Current status for SNF storage.
- 4.2 SNF storage facility design, licensing and construction.
- 4.3 SNF storage facility operation, maintenance and monitoring.
- 4.4 Long-term/extended storage of SNF.

5. SNF/HLW Disposal

- 5.1 Potential host rocks/sites investigation and evaluation.
- 5.2 Underground research laboratory (URL) development.
- 5.3 SNF/HLW encapsulation, packaging and transportation.
- 5.4 Repository design and performance/safety assessments.

6. Decontamination & Decommissioning (D&D)

- 6.1 Planning and waste minimization.
- 6.2 Decontamination technology.
- 6.3 Dismantle technology.
- 6.4 Site clean-up and environmental remediation.

Simplified Conference Schedule

Sunday, 25th October

Time	Events	Location
15:00-18:00	Registration	1F Hall

Monday, 26th October

Time	Events	Location
08:00-17:00	Registration	4F Hall
09:00-10:30	Opening ceremony & plenary sessions	Windsor Square
10:30-10:55	Coffee Break (Group photo)	4F Hall
10:55-12:00	Plenary sessions	Windsor Square
12:10-13:10	Lunch	Windsor Square
13:10-15:15	Session A1: SNF/HLW Disposal	Meeting Room East
	Session B1: Radioactive Wastes Treatment	Meeting Room West
	Session C1: LLW/ILW Disposal	Meeting Room North
15:15-15:40	Coffee Break	4F Hall
15:40-17:45	Session A2: SNF/HLW Disposal	Meeting Room East
	Session B2: Radioactive Wastes Treatment	Meeting Room West
	Session C2: LLW/ILW Disposal	Meeting Room North
18:00-20:30	Banquet	Windsor Square

Tuesday, 27th October

Time	Events	Location
08:00-16:00	Registration	4F Hall
09:00-10:40	Session A3: SNF/HLW Disposal	Meeting Room East
	Session B3: Radioactive Wastes Treatment	Meeting Room West
	Session D1: Decontamination & Decommissioning	Meeting Room North
10:40-11:00	Coffee Break	4F Hall
11:00-12:15	Session A4: SNF/HLW Disposal	Meeting Room East
	Session E1: Management Policies, Regulations, and Programs	Meeting Room West
	Session D2: Decontamination & Decommissioning	Meeting Room North
12:15-13:30	Lunch	Windsor Square
13:30-15:35	Session A5: SNF/HLW Disposal	Meeting Room East
	Session E2: Management Policies, Regulations, and Programs	Meeting Room West
	Session F1: Spent Nuclear Fuel (SNF) Storage	Meeting Room North
15:35-16:00	Closing Ceremony	Meeting Room East
16:00-17:00	Committee management meeting	Meeting Room East

Wednesday, 28th October (Technical tour)

- Destination: 921 Earthquake Museum, Takuan Hydro Power Plant and Sun-Moon Lake.
- Be noted: Bus starts from Windsor Hotel at 8:10 AM and returns after dinner. (Lunch and dinner are included.)

Detailed Conference Schedule

Monday, 26th October

Time	Events	Location
8:00-17:00	Registration	4F Hall
9:00-9:10	Opening ceremony	Windsor Square
9:00-9:15	Opening remark Ching-Tsuen Huang, Chairman, Steering Committee of 5th EAFORM Welcome remark Chin Pan, Chairman of Chung-Hwa Nuclear Society	Windsor Square
9:15-12:00	Plenary sessions	Windsor Square
9:15-9:40	Renewed Approaches to Geological Disposal Programme in Japan Dr. Mitsuo Takeuchi, NUMO	Windsor Square
9:40-10:05	Current status and prospects of radioactive waste management in Korea Dr. Chul-Hyung Kang, KORAD	Windsor Square
10:05-10:30	Separation of Waste Graphite from HTGR Spent Fuel by Electric Method Prof. Jing Chen, Tsinghua University	Windsor Square
10:30-10:55	Coffee Break (Group photo)	4F Hall
10:55-11:20	A Cascade Approach to Performance Assessment for Regulatory Compliance Demonstration Dr. Russell Chris Camphouse, SNL	Windsor Square
11:20-11:40	Regulatory Control of Radioactive Waste Management in Taiwan Wen-Chung Liu, Deputy Director, FCMA	Windsor Square
11:40-12:00	Current Status and Prospects of Radioactive Waste Disposal Management in Taiwan Tian-Huang Huang, Deputy Director, TPC	Windsor Square
12:10-13:10	Lunch	Windsor Square

Monday, 26th October

Session A1: SNF/HLW Disposal

Time: 13:10-15:15

Room: Meeting Room East

Co-Chairs: Shih-Chung Cheng (INER), Yonghai Guo (BRIUG)

Item	Article	Page of abstract
S5-A01	The Isotopic Characteristic of Groundwater and Its Hydrogeological Significance in Yamansu and Tianhu Area, the Potential Area of China's High Level Radioactive Waste Disposal Repository Guo Yonghai, LI Yawei, Wang Hailong, Wang Ju, Su Rui, Xiao Feng, Liu Shufen	143
S5-A02	Seismic stability assessment of the underground drift for geological disposal during operational phase Shigeru Kubota, Yoichi Yamamoto, Hiroshi Shimbo	144
S5-A03	Modeling Thermal-Hydraulic-Mechanical-Chemical Interaction Phenomena in Buffer Material of Engineered Barrier System Chen-Feng Yeh, Shih-Jung Wang, Kuo-Chin Hsu, Cheng-Haw Lee	145
S5-A04	Determining the Diffusion Coefficient for a Sequentially Reactive Through-Diffusion Model Chih-Lung Chen	146
S5-A05	Flow and Transport Models for the Eastern K-area Neng-Chuan Tien	147

Session B1: Radioactive Wastes Treatment

Time: 13:10-15:15

Room: Meeting Room West

Co-Chairs: Ming-Chee Wu (NCKU), Yue Zhou Wei (Shanghai Jiao tong University)

Item	Article	Page of abstract
S2-B01	Preparation and Characterization of TiO ₂ -Based Inorganic Adsorbent for the Removal of Cobalt Radionuclide in Wastewater Wen-Chi Tsai, Chi-Hung Liao, Jen-Chieh Chung	113
S2-B02	Synthesis of Nano-TiO ₂ by Titanium Sulfate Hydrolysis and Their Adsorption Property to Sr	114

Yu-Song Li, Yu Zheng, Zhen-Tao Zhang

Adsorption Efficiency of 137Cs and 90Sr Using a Granular Aluminosilicate

S2-B03	Material	115
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Shih-Chieh Chien, Wei-Shiang Lin, Chun-Ping Huang

Performance of Wet Oxidation and High Efficiency Solidification System for

S2-B04	Treatment of Ion Exchange Resin	116
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Yih-Ping Chen

A Preliminary Micro-CT Study on Corrosion of Ironware Discovered from

Niao-Sung Culture ERA, Taiwan

S2-B05	Chia-Chen Hsu, Ming-Chee Wu, Chuan-Pin Lee, Mon-Shieh Yang, Tsuey-Lin Tsai	117
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Session C1: LLW/ILW Disposal

Time: 13:10-15:15

Room: Meeting Room North

Co-Chairs: Tai-Tien Wang (NTUT), Motoi Kawanishi (Asano Taiseikiso Engineering Co.)

Item	Article	Page of abstract
S3-C01	Study the Adsorption Parameters of Buffer/Backfill Materials for Radioactive Waste Disposal Sites Yu-Lin Tu, Chuan-Pin Lee, Ming-Chee Wu, Shih-Chin Tsai, Ching-Yuan Liu, Tsuey-Lin Tsai	128
S3-C02	Technical Subjects of Nuclear Radioactive Waste Disposal Cavern Construction and Excavation Experience on Large Underground Caverns Yoshihiro Ito, Chuan-Sheng Chang, Yoshiaki Tasaka, Yasumasa Suzuki, Toshihiro Koyama	129
S3-C03	Integrating PFLOTRAN into the Waste Isolation Pilot Plant Performance Assessment for Three-Dimensional Model Heeho Park, Glenn Hammond	130
S3-C04	Seismic response of a rock tunnel and associated crack variation Ya-Chu Chiu, Chien-Lun Kung, Jyh-Chau Liou, Ding-Shing Cheng, Tai-Tien Wang	131
S3-C05	Hydrogeological Characterization Technology for Fracture Rock Masses: Recent Development and Engineering Application in Taiwan Shang-Shu Zhan, Han-Hsiang Tseng, Tai-Tien Wang, Tzuu-Hsing Ueng, Tsan-Hwei Huang, Yee-Ping Chia	132

15:15-15:40

Coffee Break

Monday, 26th October

Session A2: SNF/HLW Disposal

Time: 15:40-17:45

Room: Meeting Room East

Co-Chairs: Chein-Lee Wang (NCKU), Yoichi Yamamoto (NUMO)

Item	Article	Page of abstract
S5-A06	Seismic stability assessment of the engineered barrier system for the geological disposal against large ground motions Yoichi Yamamoto, Shigeru Kubota, Sin Sato	148
S5-A07	Thermal Dimension Analysis of the HLW Horizontal Disposal Honggang Zhao, Wang Ju, Su Rui	149
S5-A08	Preliminary evaluation of effects of large earthquakes on K-area Chi-Jen Chen, Yuan-Chieh Wu, Yi-Ren Wang, Yu-Cheng Hou, Che-Wei Hu, Cheng-Yu Pan, Meng-Hsiu Hsieh, Chi-Che Hung	150
S5-A09	The current status and planning of radionuclides migration experiments in Taiwan Yu-Hung Shih, Tsuey-Lin Tsai, Liang-Cheng Chen, Te-Yen Su, Chuan-Pin Lee, Shih-Chin Tsai	151
S5-A10	Research on the Engineering Properties of Concrete Applied for the Plug in the Radioactive Waste Disposal Tunnel Ching-Tu Chang, Meng-Pei Yang, Yu-Pei Chen, Tsai-Ping Lee	152

Session B2: Radioactive Wastes Treatment

Time: 15:40-17:45

Room: Meeting Room West

Co-Chairs: Tsong-Yang Wei (INER), Yan Wu (Shanghai Jiao Tong University)

Item	Article	Page of abstract
S2-B06	Volume Reduction of Radioactive Solid Waste in Institute of Nuclear Energy Research in Taiwan Wen-Cheng Lee, Yung-Chih Chen, Hung-Hao Liu	118
S2-B07	Development of Porous Silica-Based Inorganic Adsorbents for Radioactive Contaminated Wastewater Treatment Yue-Zhou Wei, Yan Wu, Zi Chen, Hitoshi Mimura	119

S2-B08	The Solidification of the Radioactive Liquid Wastes in INER by Utilizing Polymer-based Oil Absorbents Hsien-Te Hsieh, Chin-Chang Shen	120
S2-B09	Adsorption Behavior of Silica-Based AMP Hybrid absorbent for Cs Yan Wu, Xiao- Xia Zhang, Yue-Zhou Wei, Hitoshi Mimura	121
S2-B10	A study of the solidification of tritium-containing evaporator concentrates Chung-Yung Lin	122

Session C1: LLW/ILW Disposal

Time: 15:40-17:45

Room: Meeting Room North

Co-Chairs: Chuan-Pin Lee (NCKU), Heeho Park (SNL)

Item	Article	Page of abstract
S3-C06	Estimation of the evaporative loss from evapotranspiration rate using groundwater quality Hyun-Jin Cho, Haeryomg Jung, Jeong-Hwan Lee	133
S3-C07	Evaluation of pH and redox environment in sub-surface disposal Tatsuhiro MITSUKE, Naoyuki TAMURA, Tomofumi SHIMIZU	134
S3-C08	Service-life prediction of reinforced concrete structures in subsurface environment Kwon ki-jung , Haeryong Jung, Joo-wan Park	135
S3-C09	Analytical estimation on weathering and alkaline alteration of bedrock wall Takeshi Yamamoto, Takahiro Oyama	136

18:00-20:30 Banquet

Tuesday, 27th October

Session A3: SNF/HLW Disposal

Time: 09:00-10:40

Room: Meeting Room East

Co-Chairs: Chuen-Fa Ni (NCU), Russell Chris Camphouse (SNL)

Item	Article	Page of abstract
S5-A11	A study of Safety Evaluation of the Deep Underground Excavation Subject to Remotely Strong Earthquakes with Long Recurrence Period Using an Offshore Island as a Study Site Yu-Tien Tsai, Ching-Han Cheng, Hung-Jen Wu, Wei-Sin Chen, Shu-Jun Chang	153
S5-A12	A study on thermal alteration of cementitious material in TRU radioactive waste disposal Daisuke Hayashi, Hitoshi Owada, Naoki Fujii, Kumi Negishi	154
S5-A13	A Preliminary Study on the Selection Requirements of a Site for Securing the URL Facilities in Korea Min Young Jung, Sang Heon Lee, Jong Soon Song	155
S5-A14	Biosphere Dose Assessment for Spent Fuel Disposal in Taiwan Ping-Ji Huang, Hsiu-Wei Lee	156

Session B3: Radioactive Wastes Treatment

Time: 09:00-10:40

Room: Meeting Room West

Co-Chairs: Yih-Ping Chen (INER), Yongliang Xiong (SNL)

Item	Article	Page of abstract
S2-B11	Calixcrown-functionalized Thermo-responsive Hydrogel Microspheres for Selective Capture and Controlled Release of Cesium in Seawater Gang Ye, Rong Yi, Dachao Lv, Jing Chen	123
S2-B12	Adsorption Behaviors of Actinoid (U, Am, Np) on Various Zeolites Hitoshi Mimura, Minoru Matsukura, Natsuki Fujita, Hitoshi Kanda, Akira Kirishima, Nobuaki Sato	124

S2-B13	Experimental Determination of Solubility of Cerianite (CeO_2) in High Ionic Strength Solutions at Elevated Temperatures: An Analog to Tetravalent Actinides Yongliang Xiong	125
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Session D1: Decontamination & Decommissioning

Time: 09:00-10:40

Room: Meeting Room North

Co-Chairs: Tsuey-Lin Tsai (INER), Gang Ye (Tsinghua University)

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S6-D01	A Study on Approach of Decommissioning Waste Estimation for Nuclear Power Plant Shu-Jun Chang, Ching-Han Cheng, Hung-Jen Wu, Yu-Tien Tsai, Wei-Sin Chen	166
S6-D02	Radiation survey and site investigation methods for decommissioning of radiological site Chi-Fu Dai, Chi-Feng Lin, Chih-Han Chang, Jyi-Lan Wu, Hseun-Chi Hsiao	167
S6-D03	Remediation of Contaminated Forest by Spent Mushroom Bed Toshihiko Ohnuki, Fuminori Sakamoto, Nafumi Kozai, Kazuhiro Shiina, Kenji Tanaka, Jun Namekawa, Shinya Yamasaki	168
S6-D04	The Waste Reduction by Washing Process for Contaminated Soil Chin-Hsiang Kan, Tsong-Yang Wei	169

10:40-11:00 Coffee Break

Tuesday, 27th October

Session A4: SNF/HLW Disposal

Time: 11:00-12:15

Room: Meeting Room East

Co-Chairs: Cheng-Kuo Lin (ITRI), Masato Kobayashi (RWMC)

Item	Article	Page of abstract
S5-A15	Numerical Simulations of Radionuclide Transport for Three-Dimensional Discrete Fracture Networks Chuen-Fa Ni, I-Hsien Lee	157
S5-A16	Development of equipment for in-situ tracer experiment and its application to granitic rock mass Y. Tanaka, K. Miyakawa, T Motoshima, K Goto, K. Takayasu	158
S5-A17	Applications of reaction-path modelling in geological disposal concept of radioactive waste Cheng-Kuo Lin, Yu-Te Chang, Pei-Shan Hsieh, Shih-Chien Chen	159

Session E1: Management Policies, Regulations, and Programs

Time: 11:00-12:15

Room: Meeting Room West

Co-Chairs: Wen-Chung Liu (FCMA), Kohta Juraku (Tokyo Denki University)

Item	Article	Page of abstract
S1-E01	Update on the United States Department of Energy's Used Fuel Disposition R&D Campaign Kevin A. McMahon, Peter N. Swift, Jens T. Birkholzer, Shannon Bragg-Sitton, Robert J. MacKinnon, Sylvia J. Saltzstein, Ken B. Sorenson	103
S1-E02	The security concerns in upgrade of low level radioactive wastewater treatment system Shuai Wang, Qiang Qin, Yue Deng, Kun Chen, Liubin He, Yanbo Qiao, Zhenghua Qian, Xueyang Liu, Hongyu Wang, Hongjun Ma	104
S1-E03	Public communication in Japanese geological disposal project of high-level radioactive waste Kenichi Kaku, Kumiko Ezaki, Maya Shimizu, Mitsuyuki Akashi, Mutsumi Inoue, Takashi Tomimori	105

Session D2: Decontamination & Decommissioning

Time: 11:00-12:15

Room: Meeting Room North

Co-Chairs: Yuan-Horng Shyu (FCMA), Toshihiko OHNUKI (JAEA)

Item	Article	Page of abstract
S6-D05	The application of the 3D models of reactor pressure vessel and its internals in decommissioning <u>Yen-Yin Chen, Hsueh-Yuan Lee, Yu-Hsiang Hung</u>	170
S6-D06	Experiment of 14C Removal from Spent Resin using Ultrasonic Wave and Ammonium Phosphate <u>Seung-il Kim, Duk-won Kang, Hyun-ki Kim, Jun Heo, Young-soo Lee, Jun-seop Kim, Dae-sung Kim</u>	171
S6-D07	Planning of radwaste transportaiton during decommissioning in Chinshan NPP in Taiwan <u>Hsien-Ming Hsiao, Hsien-Te Hsieh, Chung-Hao Huang, Chin-Chang Shen</u>	172

12:15-13:30 Lunch

Tuesday, 27th October

Session A5: SNF/HLW Disposal

Time: 13:30-15:35

Room: Meeting Room East

Co-Chairs: Ming-Hsu Li (NCU), JONG SOON SONG (Chosun University)

Item	Article	Page of abstract
S5-A18	Long-term stability of the potential host rocks in Taiwan: a tectonic perspective Wayne Lin	160
S5-A19	Study on experimental methods for understanding and evaluation of corrosion phenomena of waste disposal package Masato KOBAYASHI, Mariko NAKAYAMA, Masahiro KAWAKUBO, Hidekazu ASANO	161
S5-A20	Experimental Determination of Solubility of Neodymium Hydroxide in Na ₂ SO ₄ Solutions to High Ionic Strength At 298.15 K under Well-Constrained Conditions: Applications to Nuclear Waste Isolation Yongliang Xiong, Leslie Kirkes, Cassie Marrs	162
S5-A21	Development of airborne magnetic survey technique and its preliminary survey in Taiwan Lun-Tao Tong, Wayne Lin, Po-Tsun Lee	163
S5-A22	Mechanical Analysis of the EDZ in Rock Masses Chihsen T. Lin, You-Hao Wu	164

Session E2: Management Policies, Regulations, and Programs

Time: 13:30-15:35

Room: Meeting Room West

Co-Chairs: Wen-Chuan Chen (FCMA), Jeong-Hwan Lee (KORAD)

Item	Article	Page of abstract
S1-E04	Incorporating Value Discussions into High Level Radioactive Waste Disposal Policy: Results of Developing Fieldwork Rin Watanabe, Kohta Juraku	107
S1-E05	A Cascade Approach to Performance Assessment for Regulatory Compliance Demonstration R. Chris Camphouse	108

S1-E06	Efforts in the field of education for Japanese geological disposal of high-level radioactive waste Kenichi Kaku, Kumiko Ezaki, Maya Shimizu, Takashi Tomimori, Toshihide Kagami	109
S1-E07	International cooperation strategy of radioactive waste management in Korea Ou Jeong Yoo	110
S1-E08	Recent HLW Policy Reform in Japan and Its Implications: A Sociological Review Towards the Further Improvement Kohta Juraku	111

Session F1: Spent Nuclear Fuel (SNF) Storage

Time: 13:30-15:35

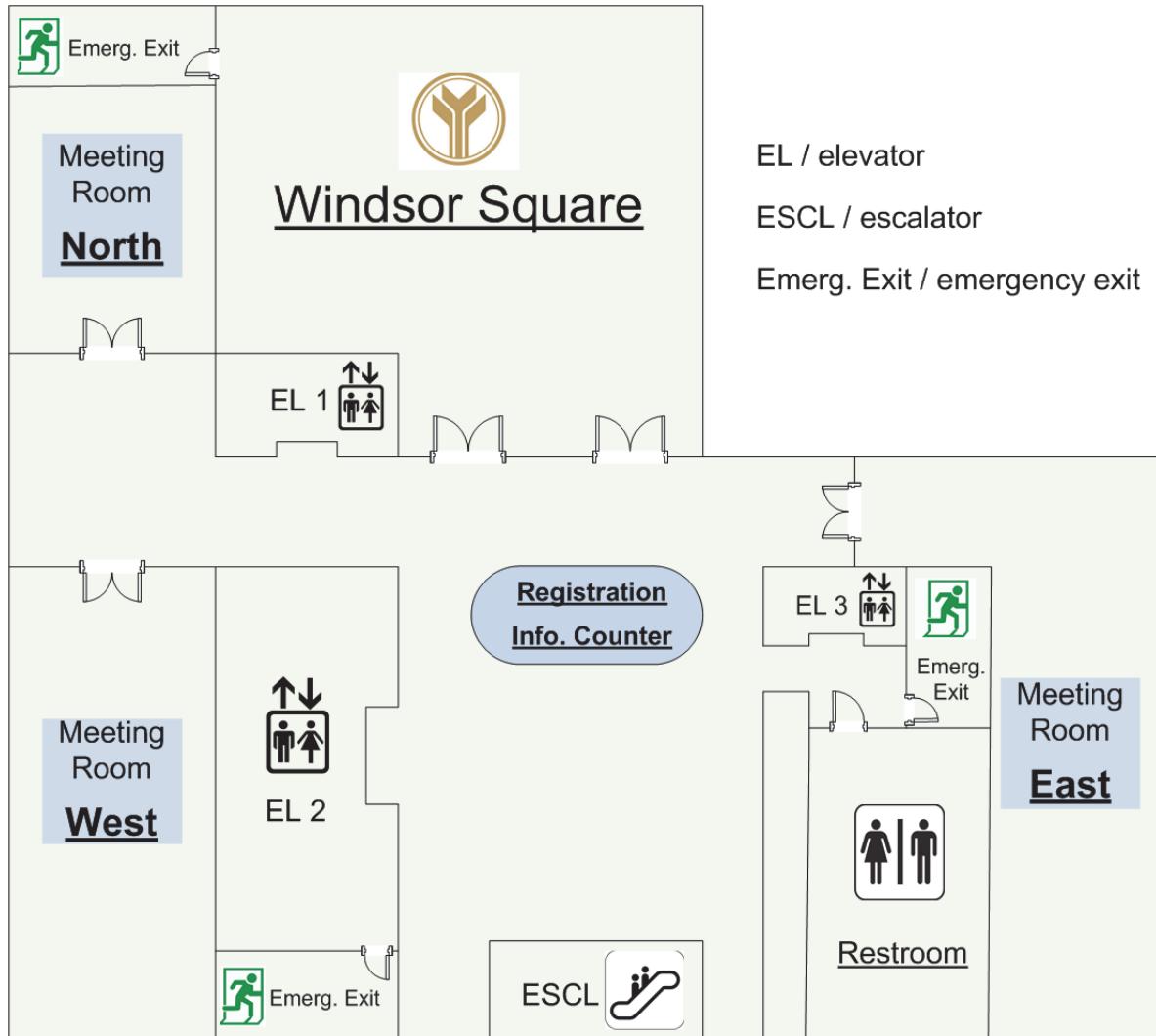
Room: Meeting Room North

Co-Chairs: Jia-Jyun Dong (NCU), Honggang Zhao (BRIUG)

Item	Article	Page of abstract
S4-F01	Primary criticality safety analysis for CG-S type PWR spent fuel storage cask Shouhai Yang, Jie Liu	138
S4-F02	A Feasibility study on interfaces of dry storage and final proposal of nuclear spent fuels Chih-Hao Chen, Yuhao Huang, Ying-Hsu Chen, Chia-Wei Chang	139
S4-F03	Consideration of ROK's spent fuel dry storage monitoring system Kyong-woo Park, Sang-jin Lee, Seong-ho Sun, Il-woo Do, Jin-kyoung Kim	140
S4-F04	The research on the disposal technique of cross linked polyethylene High Integrity Container Li Chao, Pan Yue-long, Yang Lin-jun	141

15:35-16:00	Closing Ceremony	Meeting Room East
16:00-17:00	Committee management meeting	Meeting Room East

Layout of meeting rooms (4F) in Windsor Hotel



Technical Tour

Destination:

1. 921 Earthquake Museum
2. Takuan Hydro Power Plant
3. Sun-Moon Lake

Be noted: Bus starts from Windsor Hotel at 8:10 AM and returns after dinner. (Lunch and dinner are included.)

921 Earthquake Museum

At 01:47AM on September 21, 1999, the central part of Taiwan was struck by an earthquake that registered 7.3 on the Richter Scale. The resultant loss of life and damage to property put it among the worst natural disasters of the past century in Taiwan. In the wake of the 921 disaster, the local government decided to preserve some of the phenomena related to the earthquake such as slips in the fault line, collapsed school structures, raised river beds and other selected locations, to serve as reminders for the public of the need to prepare for such disasters and to be ready to provide emergency rescue services.



With the rebuilding of Kwangfu Junior High on its present site, the Earthquake Memorial Museum was renamed the 921 Earthquake Museum of Taiwan on February 13, 2001. The new plan retains the original sites as a record of the damage wrought by the earthquake, and it also adds educational facilities designed to inform the public and school children about earthquakes and disaster readiness.

Takuan Hydro Power Plant

Takuan Power Station, which belongs to Taiwan Power Company, consists of two stations, namely, Takuan No. 1 and No. 2 Stations. Both stations use the water from Sun-Moon Lake for power generation. The water of Sun-Moon



Lake is from Wuchieh Regulating Pond at the upper reaches of the Choshui River and conveyed through a 13,727 m long tunnel. The Sun-Moon Lake, having an area of 8.3 km², a depth of 27 m and a maximum storage capacity of 142.4 million m³, is a famous scenic resort of Taiwan.

Sun-Moon Lake

The Sun Moon Lake National Scenic Area is praised for its five major recreational systems, including the lake, Shueili River, Puli, Jhuoshuei River and Jiji. The surrounding areas stretch to cover known tourist spots including Taumi, Checheng, Jiji, Shueisheda Mountain, Sangyong Falls, Mingtan Reservoir and Shueili River.



Divided by Lalu Island, the Sun Moon Lake scenic area got its name from the unique terrains that look like sun on one side and crescent moon on the other. Crowned as one of the Eight Wonders of Taiwan, Sun Moon Lake is also the most famous source of hydroelectric power; offering key tourist themes - “high mountain and lake”, “indigenous culture”, and ”nature ecology,” the Sun Moon Lake Scenic Area attracts more than six million visits each year.

Sun Moon Lake features the only full-range 3D tours (lake, sky and land) in Taiwan. The lake cycling trail has been dubbed by CNNGO, CNN as one of the most beautiful cycling trails in the world. Top scenic spots in the lake area include Lalu island, Weneu Temple, Cien Pagoda, Lalu Island, Syuentzang Temple, Xian Mountain, Yongjie Bridge, Tongxin Bridge, Christian Church, Meihe Garden, Formosan Aboriginal Cultural Village and Snake Kiln, and the 14 lake trails are the top choices for sightseeing and leisure activities; specialty recreational locations in surrounding areas include (organized based on tour theme): Jiji and Checheng (Railway Nostalgic Trip); Dili and Sangyong (Indigenous Village Tour); Lugao and Seshui (Black Tea Pottery Tour) and Puli Taumi and Toushe Live Basin (Nature and Ecological Tour).

Trips to Windsor Hotel, Taichung(台中裕元酒店交通指引)

Driving Directions

1. By ZhongShan Freeway

Exit at Taichung Interchange and go straight toward ShaLu direction about 500 meters. Turn right on AnHe Road to see Hotel Parking sign on your left, and turn left to reach the hotel.

2. By Formosa Freeway

Going South (two ways to reach hotel):

(1) Transfer to ZhongShan Freeway (#1) from Hsinchu Interchange toward Taichung direction. Exit at Taichung Interchange and go straight toward ShaLu direction about 500 meters. Turn right on AnHe Road to see Hotel Parking sign on your left, and turn left to reach the hotel

(2) Transfer to Freeway (#4) from ZhongGang Interchange and go straight on Freeway(#4). Transfer to ZhongShan Freeway (#1) from Taichung Interchange toward Taichung direction. Exit at Taichung Interchange and go straight toward ShaLu direction about 500 meters. Turn right on AnHe Road to see Hotel Parking sign on your left, and turn left to reach the hotel.

Going North:

Transfer to ZhongShan Expressway (#1) from Chunghwa Interchange toward Taichung direction. Exit at Taichung Interchange and go straight toward ShaLu direction about 500 meters. Turn right on AnHe Road to see Hotel Parking sign on your left, and turn left to reach the hotel.

3. By Expressway 74 (Zhong Zhang Expressway)

From Chunghwa and KuaiGuan

Exit at QingHai Road Interchange and go straight after one intersection. Turn left on FuKe Road, go straight on FuKe Road and turn left on AnHe Road. Go straight about 100 meters to see Hotel Parking sign on your right, and turn right to reach the hotel.

From WuFong and TanTze

Exit at XinTun Road Interchange and go straight after one intersection. Turn right on FuKe Road, go straight on FuKe Road and turn left on AnHe Road. Go straight about 100 meters to see Hotel Parking sign on your right, and turn right to reach the hotel.

Taiwan High Speed Rail (Taichung Station)

Take THSR to Taichung Station, and transfer as follow:

Taichung Station: Bus and Transfer information

Exit 3 - Taiwan Railways Administration

Exit 5, 6 - City Express Bus

Exit 7 – Taxi

Exit 6 - THSR Free Shuttle Bus

Take THSR free shuttle bus No.161 and get off at Windsor Hotel Station. Available from 07:35am to 00:10am, one bus every 20-30 minutes and the total trip time is around 20-25 minutes.

Exit 7 - Taxi

Service total trip time is around 15-20 minutes and fare will be approximately NT\$250.

Taiwan Railways Administration (Taichung station)

Take TRA to Taichung Station, and transfer as follow:

1. Taxi

The total trip time is around 25-30 minutes and fare will be approximately NT\$300.

2. City Bus

- (1)Take BRT Blue Line, exit at A13 FuAn station.
- (2)Take bus No.169, exit at FuAn stop.

Airplane (Taoyuan Airport / Taichung Airport)

1. Taxi

(1)From Taoyuan Airport: The total trip time is around 2 hours and fare will be approximately NT\$3,000-NT\$3,500.

(2)From Taichung Airport: The total trip is around 30-35 minutes and fare will be approximately NT\$350.

2. U Bus (Taoyuan Airport - ZhongGang Transfer Station)

The total trip time is around 2.5 hours and fare will depend on current company rate.

U Bus

Take U Bus and exit at ZhongGang Transfer Station. Hotel will be on the opposite side of the station.

Pick-Up Service

Windsor Hotel Taichung offers personal airport pick-up service or self-driving rental service. The vehicle dispatched will be determined according to your needs and number in your party so that you may plan your travels accordingly without worry. Reservation is available from the hotel for rental service at an additional charge, please dial 886-4-24656555 transfer to Concierge.

自行開車

1. 國道一號中山高速公路路線：

下台中交流道(台灣大道)後，往沙鹿方向，直走約500公尺，遇到第一個紅綠燈右轉進入安和路，左手邊即可看到飯店停車場指示標誌，左轉進入後直行，飯店大門就會在您的左手邊。

2. 國道三號福爾摩沙高速公路路線：

台北南下(有兩種方式可以到達)：

(1)於「新竹系統」轉國道1號往南(台中方向)，下台中交流道(台灣大道)後，往沙鹿方向，直走約500公尺，遇到第一個紅綠燈，右轉進入安和路，左手邊即可看到飯店停車場指示標誌，左轉進入後直行，飯店大門就會在您的左手邊。

(2)於「中港系統」轉國道4號，直行到「台中系統」轉國道1號往南(台中方向)，下台中交流道(台灣大道)後，往沙鹿方向，直走約500公尺，遇到第一個紅綠燈，右轉進入安和路，左手邊即可看到飯店停車場指示標誌，左轉進入後直行，飯店大門就會在您的左手邊。

高雄北上：

由國道三號，於「彰化系統」轉國道1號往北(台中方向)，下台中交流道(台灣大道)後，往沙鹿方向，直走約500公尺，遇到第一個紅綠燈右轉進入安和路，左手邊即可看到飯店停車場指示標誌，左轉進入後直行，飯店大門就會在您的左手邊。

3. 台74線快速公路(中彰快速道路)：

從彰化快官方向：

下西屯二出口(青海路)，第二個紅綠燈口左轉福科路，遇到第一個紅綠燈左轉安和路，直走約100公尺，右邊即會看到飯店停車場的指示標誌。

從霧峰、潭子方向：

下西屯三出口(西屯路)，第二個紅綠燈口右轉福科路，遇到第一個紅綠燈左轉安和路，直走約100公尺，右邊即會看到飯店停車場的指示標誌。

搭乘高鐵(台中站)

1. 高鐵台中站各接駁出口資訊：

台鐵新烏日站出口3；客運轉運站出口5、6；排班計程車出口7左側，以上出口皆可轉乘。

2. 高鐵快捷公車出口6：

161 高鐵快捷公車免費接駁

搭乘「高鐵台中站—東海大學—中科院管理局」路線於裕元花園酒店站下車。早上07：35~晚上00：10每隔約20-30分鐘一班，車程約20-25分鐘。

3. 排班計程車出口7：

車程約15-20分鐘，車資約NT\$250。

搭乘台鐵(台中車站)

1. 計程車：

台中車站下車後，時間約25~30分鐘，車資約NT\$300。

2. 巴士：

- (1) 搭乘BRT藍線於A13(福安站)下車。
- (2) 搭乘169台中-清水線於福安站下車。

搭乘飛機(從桃園國際機場或台中清泉崗機場)

1. 計程車：

(1)於桃園國際機場，時間約2小時，車資約NT\$3,000~NT\$3,500。

(2)於台中清泉崗機場，時間約30~35分鐘，車資約NT\$350。

2. 巴士：

於桃園國際機場，搭乘統聯客運「桃園國際機場—台中中港轉運站」路線，時間約2.5小時，票價依客運公司公告價。

搭乘客運

由各地搭乘客運於中港轉運站下車，飯店位於轉運站對面。

專車接駁服務

飯店提供附駕接送或租車自駕服務，相關資訊請洽(04)2465-6555轉接服務中心，由專人為您服務

