



## The 18<sup>th</sup> 2010 WiN Global Annual Conference

### NUCLEAR POWER PIVOTAL CHOICE FOR GREEN GROWTH

9-14 May 2010

Paradise Hotel Busan, Korea

**Organized by** Women in Nuclear-Global & Women in Nuclear-Korea  
**Hosted by** Women in Nuclear-Korea  
**Sponsored by** Korea Ministry of Education, Science and Technology  
Korea Ministry of Knowledge Economy

## PROGRAMME

**Sunday 9 May**

(Sydney Room)

8.00~17.00 Registration

### **Executive and Board Meeting**

8.00 Coffee with Pastry

8.30 Executive Meeting (Executive members only)

10.00 Coffee Break

10.10 Executive Meeting

12.00 Lunch (for Executive and Board meetings attendees)

13.00 Board Meeting (Board members, Executive members, Chapter representatives and their guests only by pre-application)

15.00 Coffee Break

15.10~17.00 Board Meeting

## **Welcome reception**

18.00          Cocktail and Finger Foods

## **Monday 10 May**

8.00~17.00   Registration

### **Technical and Cultural Tour (Optional)**

7.30          Meeting at the Hotel lobby and departure for Changwon(Doosan Heavy Industries & Construction)

9.00          Tour of Doosan Heavy Industries & Construction

10.30        Departure for Geoje  
Box Lunch (offered by Doosan)

13.00        Tour of Daewoo Shipbuilding & Marine Engineering Shipyard

14.00        Tour of Oedo Island & Hallyeosudo Marine Nat'l Park by excursion ship

17.00        Departure for Busan

21.00        Arrive at hotel

## **Tuesday 11 May**

*(Grand Ball Room)*

7.50~17.00   Registration

7.30          Coffee with Pastry

### **Opening**

Chair : Yun-sil Lee, KIRAMS, Vice President of WiN-Korea

08.40        Opening Remarks (Se-Moon Park, President of WiN-Korea)

Welcome Speech (Seong-Woon Hong, Board Chair of WiN-Korea)

Presentation of the daily programme (Se-Moon Park, President of WiN-Korea)

## WiN-Global General Assembly

Chair: Cheryl Boggess, President of WiN-Global

09.00~10.30 General Assembly

10.30 Coffee Break

## Presentation of Country Reports I

Moderators: Seong-Woon Hong, Board Chair of WiN-Korea  
Jessie Chiu, AEC, WiN-Taiwan

10.50 Presentations by 12 countries (in alphabetical order)  
*Presentation will last 6 minutes for each country (highlights only)*

Australia, Austria(IAEA), Bangladesh, Brazil, Bulgaria, Canada, **Czech Republic**, Finland, France, Germany, Hungary, Indonesia

12.10 **Luncheon** (sponsored by KEPCO : 7min. of sponsor's video)

## Opening Ceremony

Chair : Se-Moon Park, President of WiN-Korea

13.40 Photo Panorama of WiN-Global (presented by Eva Gyane, President of WiN-IAEA)

14.00 Welcome Speech (Cheryl Boggess, President of WiN-Global)

Congratulatory Speech (Jung Hyun Kim, Vice Minister, Ministry of Education, Science and Technology)

Congratulatory Speech (Gabriele Voigt; Message from Mr. Yukiya Amano, IAEA General Director)

14.20 Video Messages (interpretation by Ingeborg Hagenlocher, Former President of WiN-Switzerland)

## Key Note Speeches

Chair: Re-Na Lee, Professor, School of Medicine, Ewha Womans Univ., WiN-Korea

14.30 KunMo Chung, Former Minister, Ministry of Science and Technology  
Theme: "Vision and Strategy with Nuclear and Renewable Resources in Korea for Green Growth"

- 14.50 Gabriele Voigt, Director, Office of Safeguards and Analytical Services, IAEA  
Theme: "Human Resources and Gender Balance in the IAEA"
- 15.10 Jong Shin Kim, President of Korea Hydro & Nuclear Power Co.  
Theme: "Nuclear Expansion in Korea and Overseas"
- 15.30 Coffee Break

## Presentation of Country Reports II

Moderators: Junko Ogawa, President of WiN-Japan/ Patricia Wieland, Division Head, CNEN, WiN-Brazil

- 15.50 Presentations by more than 15 countries (in alphabetical order)  
*Presentation will last 6 minutes for each country (highlights only)*

*Italy*, Japan, Pakistan, Philippines, Romania, Slovakia, Slovenia, South Africa, Spain, Sweden, Switzerland, Taiwan, Thailand, *UAE*, UK(WNA), USA, Korea

- 17.30 Adjourn

## WiN-Award Ceremony and Opening Reception

- 18.30 WiN Awarding (by Cheryl Boggess, President of WiN-Global)
- 18.40 Awardee's Speech
- 19.00 Standing Buffet with Korean Musical Performance  
"Hanultari Samulnori"

## Wednesday 12 May

*(Grand Ball Room)*

- 7.30~17.00 Registration
- 7.30 Coffee with Pastry

## Technical Session

### Plenary Panel Session

8.30 **Plenary Session I** *Nuclear Power Plant Construction and Operation*

Chair : Sungeun Kim, Assistant Professor, Korea Univ., WiN-Korea

Moderator: Käthe Sarparanta, TVO, WiN-Finland

- Soon Heung Chang, Vice President of KAIST, Korea  
"Safety Enhancement of Nuclear Power Plants"
- Kye-hong MIN, President & CEO, KRWMC, Korea  
"Radioactive Waste Management in Korea"
- TaeWoo Kim, Vice President of Doosan HI, Korea
- Irene Aegerter, President of WiN-Switzerland
- Irina Borysova, WNA, UK
- Joni Falascino, Westinghouse, WiN-USA
- Milena Prazska, AMEC Nuclear, WiN-Slovakia

10.10 Discussion (Questions and Answers)

10.30 Coffee Break

10.50 **Plenary Session II** *Nuclear, the Energy Source of the Future*

Chair : Hee-Jung Im, KAERI, WiN-Korea

Moderator: Annick Carnino, Former President of WiN-Global

- Moon Hee Chang, Senior Vice President of KAERI, Korea  
"National Plan for Future Nuclear System Development"
- Goon-Cherl Park, Professor, Seoul National Univ./President of KNS, Korea  
"Extension of Nuclear Energy Use for Future"
- Seung Kyoo An, President & CEO, KOPEC, Korea  
"The Development Strategy for Sustainable Nuclear Power"
- Yeong-Kook Oh, Division Head, NFRI, Korea  
"Status of the Fusion Energy Development as a Future Vision Energy"
- Ingeborg Hagenlocher, Former President of WiN-Switzerland  
"Fusion - Yet Another Auspicious Alley to Sustainable Energy Supply"
- Vuvu Msutwana-Qupe, NECSA, WiN-South Africa  
"Demystifying Nuclear Technology: a Sustainability Challenge"
- Karin Rantamäki, VTT TRC, President of WiN-Finland  
"Nuclear Future in Finland"

12.00 Discussion (Questions and Answers)

12.30 **Luncheon** *(Capri Room)*

13.30 **Group Photo**

### **Concurrent Technical Session**

14.00 **Concurrent Session I Special Workshop** on *Prospects of Nuclear Power Plant Construction and Operation*  
[\(Sponsored by Korea Atomic Industrial Forum\)](#)

(Grand Ball Room #1)

Chairpersons: Irina Borysova, WNA, UK/ Young Mi Nam, KAERI, Korea

**Key Note Speech:** In-Soon Chang, Former President of KAERI, Korea  
"Korea's Nuclear Technology Creating Legend and Making History"

- Zakia Begum, AEC, Bangladesh  
"Present Status of NPP in Bangladesh"
- Jin Kang, Doosan HI, Korea  
"Advanced Design Features for UAE Nuclear Power Plant Components"
- Irina Borysova, WNA, UK  
"International Standardization of Nuclear Reactor Designs"

Coffee Break

- Hyo Won Kim, Doosan HI, Korea  
"Manufacturing Process of APR1400"
- Sunmi Jeong, KHNP, Korea  
"Pilot study for Long-Term Plans of Reactor Vessel Internals"
- Gül Bahire Göktepe, Turkish AEA, Turkey  
"Prospects of Nuclear Power for the Environmental Benefits of the Turkish Energy Scene"

14.00 **Concurrent Session II** *Advanced Technology of Nuclear Power, Fuel and Materials*

(Grand Ball Room #2)

Chairpersons: Maha Aziz, WGI, USA/Sun-Ju Choi, KAERI, Korea

- Youngok Lee, KOPEC, Korea  
"Equipment Qualification for Safety-Related Equipment in Nuclear Power Plant"
- Mee Jeong Hwang, KAERI, Korea  
"A Trip Model Construction and the Application Plans of the Model"
- Yeong Hwa Lim, KHNP, Korea  
"Development of Plant Reliability Data Information System and Its Application for CANDU Type"
- Eui-Jin Kim, Doosan HI, Korea  
"The Performance Evaluation of Moisture Separation Equipment for Nuclear Steam Generator"

Coffee Break

- Hye-Young Shin, KHNP, Korea  
"Ageing Management Program for Thermal Aging Embrittlement"
- Ai Melani, KAIST, Indonesia

"Quenching Experiment on Vertical Tube Using Carbon Nano Tube (CNT) Nanofluids"

- Sang Hee Kang, KHNP, Korea

"Performance Analysis of a Passive Auxiliary Feedwater System in APR+"

14.00 **Concurrent Session III** *Radiation Protection and Application*

(Grand Ball Room #3)

Chairpersons: Patricia Wieland, CNEN, Brazil/Yun-Sil Lee, KIRAMS, Korea

- Emerita Andres Barrenechea, St.Luke's MC, Philippines  
"Thyroid Cancer Profile in the Philippines – the Efficacy of Radioactive Iodine Ablation"
- Jae-Seon Lee, KIRAMS, Korea  
"The Development of Novel Biomarkers for the Increase of Radiotherapy Efficacy"
- Tsai-yueh Luo, INER, Taiwan  
"Evaluation of the Potential of a New Radio-Thermogelling Emulsion 188Re-ECD/Lipiodol/Hydrogel for Treatment of Hepatoma"
- So Hyun An, EWU, Korea  
"Impact of Breathing Biofeedback on Patient's Dose Distribution in Respiratory-Gated Treatment"

Coffee Break

- Eunok Han, Deagu Health College, Korea  
"Analysis of the Factors on the Radiation Safety Management of PET-CT in Medical Centers"
- Jihye Baek, EWU, Korea  
" Evaluation of Volume Measurement Accuracy of 3D Ultrasound System Prostate Radiotherapy"
- Yoon-jin Oh, EWU, Korea  
" Skeletal Maturity Scores for Korean Children Using TW3 Method"

**Poster Session** (Posting from the morning)

(Sydney Room)

17.00 **Poster Session I** *Prospects of Nuclear Power Plant Construction and Operation*

**Poster Session II** *Advanced Technology of Nuclear Power, Fuel and Materials*

Chairpersons: Sunhee Park, KAERI, Korea/Yu Jung Choi, KHNP, Korea

- K-A0006 Eun-Young Choi, KAERI, Korea

"Simultaneous Measurement of Oxide Concentration in LiCl/Li<sub>2</sub>O Molten Salt for Electrochemical Reduction of Uranium Oxide Using Square Wave Voltammetry"

- K-A0023, Kwi Lim Lee, KAERI, Korea  
"A Safety Analysis of Passive Decay Heat Removal Systems"
- K-A0026, Eun Hee Lee, KAERI, Korea  
"Synthesis and Characterization of Ni-Fe-B Powders by a Co-precipitation"
- K-A0049, Eun Hee Lee, KAERI, Korea  
"Stability of Magnetite Suspensions with Poly (acrylic acid)"
- K-A0033, Seung Ok Yang, KEPCO, Korea  
"Development of the Automated Scanner for Ultrasonic Testing of Vessel Nozzle Welds in Nuclear Power Plant Using Six Sigma Methodology"
- K-A0034, Yu Jung Choi, KHNP, Korea  
"Elimination of Post Accident Sampling Requirements in OPR-1000 of Korea"
- K-A0037, Eunjin Chun, KHNP, Korea  
"Development of Structural Life Management System for Safety-Related Structures of NPP"
- K-A0044, Hyun joo Yoo, KEPCO, Korea  
"The Development of ISIMS Version 2"
- K-A0051, Seon jeong Park, KOPEC, Korea  
"Differences in Approach Between Nuclear and Conventional Seismic Standards"
- K-A0052, Jea Myoung Noh, KEPCO, Korea  
"Maintenance System for Nuclear Power Plant Structures in Korea"
- K-A0057, Dong Hee Park, KEPCO, Korea  
"Simulation of Strong Ground Motion Using Stochastic Method"
- K-A0058, Dong Hee Park, KEPCO, Korea  
"The Seismic Network for Nuclear Power Plant Sites of Korea Electric Power Cooperation"
- K-A0061, Gyoung-Ja Lee, KAERI, Korea  
"Electrochemical Detection of Trace Uranium in Aqueous System Using Uranium-Cupferron Complex"
- K-A0063, Sook-Kyung Lee, KEPCO, Korea  
"An Introduction to Optimization Study for the Operation of Engineered Safety Feature Atmosphere Cleanup Systems in Nuclear Power Plants in Korea"
- K-A0065, Se-Moon Park, KHNP, Korea  
"Seismic Monitoring System for Earthquake Safety of Nuclear Power Plant in Korea"

18.00 Adjourn

19.00 **Gala Dinner** hosted by the Mayor of Busan (Grand Ball Room)

7.30~17.00 Registration

7.30 Coffee with Pastry

## Technical Session

### Plenary Panel Session

8.30 **Plenary Session III** *Strategic Action for the Promotion of Radiation Technology*

Chair: Jae-Seon Lee, KIRAMS, WiN-Korea

Moderator: Ingeborg Hagenlocher, Former President of WiN-Switzerland, Germany

- Myung Chul Lee, Professor, Seoul National Univ., Korea  
"Strategic Action for the Promotion of Radiation Medicine"
- Jae Joo Ha, Vice President, KAERI, Korea
- Mison Chun, Professor, Ajou Univ., Korea  
"Future and Promotion in Radiation Oncology"
- Re-Na Lee, Professor, Ewha Womans Univ., Korea  
"Strategic Action for the Promotion of Radiation Technology-Radiologic Physics"
- Emerita Barrenechea, Senior Consultant, St. Luke's MC, Philippines  
"Strategic Action for the Promotion of Radiation and Nuclear Medicine"
- Reiko Imai, Physician, NIRS, Japan
- Tsai-Yueh Luo, Associate Researcher, INER, Taiwan  
"Strategic Action for the Promotion of Nuclear Medicine"

10.00 Discussion (Questions and Answers)

10.20 Coffee Break

10.40 **Plenary Session IV** *Perception and Human Resources for Nuclear Renaissance*

Chair: Soyon Kim, National Police Hospital /Vice President of WiN-Korea

Moderator: Dominique Mouillot, President ONET/President of WiN-France

- Byung Joo Min, KAERI/President of KWSE  
"Nuclear HRD and Woman Scientists and Engineers in Korea"
- Seong Kyung Cho, Professor, MyongJi Univ., Korea  
"Nuclear Risk and Risk Communication"

- Carol Berrigan, NEI, USA,
- Junko Ogawa, Professor Tokyo City University, President WiN-Japan
- Käthe Sarparanta, TVO, Finland
- Monira Hisham Al-Kuttab, Director of FANR, UAE
- Susan Brissette, Bruce Power, President of WiN-Canada

12.00 Discussion (Questions and Answers)

12.20 **Introduction of 2011 WiN-Global Conference**

12.30 Luncheon (Capri Room)

### **Concurrent Technical Session**

14.00 **Concurrent Session IV** *Radioactive Waste Management Technology*

(Grand Ball Room #1)

Chairpersons: Jessie Chiu, AEC, Taiwan/Hee-Jung Im, KAERI, Korea

- Bernard Rottner, ONET Technologies, France  
"Immobilisation of Radwaste In Synthetic Rock : An Alternative to Cementation"
- Hee-Jung Im, KAERI, Korea  
"*In situ* and On-line Measurements of the Lanthanide Ions in High Temperature for a Practical Application in Pyrochemical Processing"
- Milena Prazska, AMEC Nuclear Slovakia s.r.o., Slovakia  
"The Progressive Technology for the Removal Retention and Fixation of the Radioactive Sludge Sorbents and Non-Standard Radioactive Waste into the SIAL® Matrix"

Coffee Break

- Maha Aziz, WGI, United States  
"Modularization Design of the Liquid and Solid Waste Management System"
- Khalida Akhtar Gill, Pakistan AEC, Pakistan  
"Solvent extraction Recovery of Strontium From High Active Waste(HAW) "
- Mi-seon Jeong, UST, Korea  
"The Pseudo-Colloid Migration of four-Member Radionuclide Chains in a Fractured Porous Medium"

14.00 **Concurrent Session V** *Policy, Nuclear Safety, Security, safeguards and Environmental Issues*

(Grand Ball Room #2)

Chairpersons: Eva Gyane, president WiN-IAEA/Sun Yeong Choi, KAERI,

## Korea

- Eva Gyane, IAEA, Austria  
"The IAEA's Nuclear Safety Security and Safeguards Programme"
- Sun Yeong Choi, KAERI, Korea  
"An Analysis on Human-related Unplanned Reactor Trip Events in Korea"
- Sofya Hambaryan, IAEA, Austria  
"Safeguards Implementation Under Comprehensive Safeguards Agreements and Additional Protocols"
- Patricia Wieland, CNEN, Brazil  
"Operational Risks Management at Industrial Irradiation Plants"

### Coffee Break

- Yanti Fristikawati, Atma Jaya Univ., Indonesia  
"Legal Perspective of Environmental Protection from Nuclear Activity in Indonesia"
- Helena Janzekovic, Slovenian NSA, Slovenia  
"Toward Harmonisation of Radiation and Nuclear Safety in the European Union"
- Eun-ha Kwon, KAERI, Korea  
"Evaluating the Level of Nuclear Nonproliferation Credibility Using the AHP"

## 14.00 **Concurrent Session VI** *Human Resources, Cooperation and PA* (Grand Ball Room #3)

Chairperson: Helena Loner, Switzerland/Youngok Lee, KOPEC, Korea

- Tri Murni Soedyartomo Soentono, NNEA, President WiN-Indonesia  
"To Go to Welfare Families and the Nation is Accompanied by a Clean and Green Environment with a Nuclear Technology Solutions"
- Cristina Bucur, SNN-Cernavoda NPP, Romania  
"Nuclear Power Generation Alternative for a Clean Energy Future in Romania"
- Youngmi Nam, KAERI, Korea  
"Human Resources Development for Nuclear Personnel in Korea"

### Coffee Break

- Helena Loner, WiN-Switzerland  
"What is More Ethical - to use nuclear energy or to ban it?"
- Maria Vatamanu, NEN Co. (SNN SA), Romania

"Rejuvenation of the Staff – Preparing Young Employees to Become Specialists in Procurement Sector as Strong Support of Nuclear Energy Development"

- Ju-young An, KNEF, Korea

"Projects of KNEF for Promoting Next-Generation Understanding - Nuclear Energy Exploration Olympiad"

- Gisele Marie Aucoin, AECL, Canada

"Training 500 Trades Personnel to Dismantle and Re-build a Nuclear Reactor"

**Poster Session** (Posting from the morning)

(Sydney Room)

17.00 **Poster Session III** *Radiation Protection and Application*

**Poster Session IV** *Radioactive Waste Management Technology*

Chairpersons: Mun ja Kang, KAERI/ Kyeong Sook Kim, KEPCO, Korea

- F-A0022, Meei-Ling Jan, INER, Taiwan

"Preliminary Result of a Prototype System for Positron Emission Breast Imaging"

- F-A0023, Carlos Eduardo Gonzalez Ribeiro Alves, CNEN, Brazil

"Nuclear Medicine Facilities Assessment Through Inspections in Brazil"

- K-A0005, Hae-June Lee, KIRAMS, Korea

"Heat Shock Protein 27 Targeted Heptapeptide Sensitizes Tumors with Radio-and Chemo-Resistance"

- F-A0005, Jyi-Lan Wu, INER, Taiwan

"Solid Waste Clearance Experience in Taiwan"

- K-A0010, Ji-Hyeon Lee, UST, Korea

"Study of the Long-term Copper Corrosion"

- K-A0029, Kyeongsook Kim, KEPCO, Korea

"The Analysis of Hydrogen Isotopes"

- K-A0069, Jong-goo Kim, KAERI, Korea

"Analysis of Trace Water in Heavy Water Using FTIR"

- K-A0070, Young Rang Uhm, KAERI, Korea

"Fabrication of Low Density Polyethylene Coated PbO Nanoparticles and IT Dispersed Polymer Sheet"

17.00 **Poster Session V** *Policy, Nuclear Safety, Security, safeguards and Environmental Issues*

**Poster Session VI** *Human Resources, Cooperation and PA*

Chairpersons: In-Young Noh, KAERI/ Mi Jung Hwang, KAERI, Korea

- F-A0028, Chantel Janet De Beer, ARC-OVI, South Africa

"Colonization of Tsetse Flies as a Prerequisite for the Use of Sterile Insect Technique in South Africa"

- F-A0034, Yukiko Endo, Toyko City University, Japan  
"Effective Method in Education to Use Large Scale Cloud Chamber  
Ichiro TODA (RADO Corporation)"
- K-A0007, Eunju Jun, KAERI, Korea  
"Lessons From Successful Nuclear Power Program of the Republic of Korea"
- K-A0025, Gye-Hwi Lee, KINS, Korea  
"Public Communication of Korean Nuclear Regulatory Organization"
- K-A0028, Sun Yeong Choi, KAERI, Korea  
"Applications of Piping Failure Frequency with OPDE(OECD/NEA Piping Failure Data Exchange) Database to Korean Nuclear Safety Research"
- K-A0064, Kwangho Lee, KEPCO, Korea  
"Assessment of Design Difference Effects for CANDU6 Safety Analysis"
- K-A0071, Sunhee Park, KAERI, Korea  
"Development of a Computer Program to Compare the Two Different Versions of Computer Codes"
- K-A0072, Sunhee Park, KAERI, Korea  
"The Basic Concept of Uncertainty Analysis MODULE, SAUNA"
- K-A0073, Sunhee Park, KAERI, Korea  
"The Status of MIDAS/SMR Code Development for SMART Reactor"
- K-A0074, Yeonhee Hah, KINS, Korea  
"Korean Activities for Regulatory Capacity Building in Asia"

18.00 Adjourn

19.00 Closing Reception (with musical performance of "the SafeGuard")

## Friday 14 May

### Technical and Cultural Tour (Official)

7.30 Departure for Gyeongju

9.30 Tour of Bulguksa Temple, Tumuli Park and Cheomseongdae Observatory in Gyeongju

12.00 Departure for Ulsan

13.30 Hyundai Motor Company Factory Tour

15.00 Departure for Busan

17.00 Tour Shin-Kori NPP(APR 1400) construction site

18.30 Dinner

20.30 Arrival at Hotel or Departure for Seoul (for Aomori Tour Participants)

## Saturday 15 May

**Cultural Tour** (Optional: Expenses paid by the participants)

Seoul Tour (details on the website)

## Sunday 16 May~

### For Aomori Tour Participants only

#### **Departure for Aomori**

(Programme will be posted on the website of WiN-Japan linked with the website of 2010 WiN-Global Conference)

(for WiN board members only)



## The 18<sup>th</sup> 2010 WiN-Global Annual Conference

### Special Workshop on WiN-Global Activities

Miami Room, Paradise Hotel Busan

#### Wednesday 12 May

14.00 ~17.00 **Workshop on the Activity of Communication Committee**

Chair: Susan Brissette, President of WiN-Canada

#### Thursday 13 May

14.00 ~17.00 **Workshop on the Activity of Messaging Committee**

Chair: Dominique Mouillot, President of WiN-France