



WNU Course on



“ The World Nuclear Industry Today ”

Short Course

OVERVIEW AND KEY TOPICS IN THE WORLD NUCLEAR INDUSTRY TODAY

Seoul, South Korea

6-8 July 2016

Objective

The WNU short course on “The World Nuclear Industry Today” is designed to enhance the knowledge of attendees about the status of nuclear energy in the world today and its likely development. The course also aims to inspire attendees to further their career in this exciting and expanding field. For the participants, the expected outcomes of the WNU short courses are:

- Improved knowledge about nuclear energy in the world today;
- Recognition of how local skills and experience fit into the global nuclear picture;
- Inspiration to develop an expansive vision of where the industry can go in the future;
- Networking with nuclear professionals in their countries and with international experts.

Venue

Geon-Seol-He-Gan (Construction Bldg., 711, Eonju-ro, Gangnam-gu, Seoul, Republic of Korea)

Participants

Target participants are professionals from national nuclear research centres, local nuclear industry and potential nuclear supply chain companies, regulators and representatives of governmental bodies concerned with nuclear, environmental and energy matters, university students and academia from science and engineering departments as well as legal, social and economic fields. Depending on the host organization, invitations are extended to nearby countries.

Lecturers

Leading world experts from IAEA, World Nuclear Association, WNU, KAERI will present overviews of a full range of nuclear-related topics (see the draft programme below). Lecturers are encouraged to summarise key points and draw out important issues for further discussion. These will be taken up at coffee breaks, lunches and dinners, where the teaching faculty will be freely available to stimulate discussion and debate.

Language

All of the lecture and discussion is in English.

Registration

- Fee: 500,000 KRW/person or 500 USD
- Application form by mail or e-mail
- By 30 June, 2016
- Payment may be made by wire transfer to the following bank account
 - Name and Address of account holder:
Korea Atomic Energy Research Institute
111, Daedeok-daero 989beon-gil, Yuseong-gu, Daejeon, Korea
 - Bank Name and Address:
Woori bank
111, Daedeok-daero 989 beon-gil, Yuseong-gu, Daejeon, Korea
 - Accountant Number:
087-074376-03-001
 - SWIFT CODE:
HVBKKRSEXXX
 - Contact JuHyun Kim (+82-42-866-6202)

Contact Point

Course organizer

JuHyun Kim

Tel: +82-42-866-6202

E-mail: jhkim86@kaeri.re.kr







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Seoul, South Korea, 6-8 July 2016

PROGRAMME

| Time | Topic | Presenter | Organization |
|-------------------------------|--|------------------|---------------------------|
| 06/07/2016 – Wednesday | | | |
| 09:00-09:15 | Opening Ceremony | | |
| 09:15-09:45 | Introduction to WNU and the course | Serge Gorlin | World Nuclear Association |
| 09:45-10:45 | The future of nuclear energy | Serge Gorlin | World Nuclear Association |
| 10:45-11:15 | Refreshment Break | | |
| 11:15-12:15 | Nuclear project: economics | Milton Caplan | MZ Consulting |
| 12:15-14:00 | Lunch | | |
| 14:00-15:00 | Nuclear Project: structuring and financing | Milton Caplan | MZ Consulting |
| 15:00-15:30 | Nuclear fuel market | Milton Caplan | MZ Consulting |
| 15:30-16:00 | Refreshment Break | | |
| 16:00-16:30 | Group discussions about questions and “take-aways” | | |
| 16:30-17:00 | Panel Q&A No. 1 – Nuclear Future | | |
| 07/07/2016 – Thursday | | | |
| 09:00-10:30 | Nuclear safety, security and safeguards: the international regime | Abel J. Gonzalez | ARN, Argentina |
| 10:30-11:00 | Refreshment Break | | |
| 11:00-12:30 | Management of radiation risk in normal, accident and post-accident conditions. IAEA Report on Fukushima. | Abel J. Gonzalez | ARN, Argentina |
| 12:30-14:00 | Lunch | | |
| 14:00-15:00 | NPP operational safety | Myung-Choon Lee | KHNP |
| 15:00-15:30 | Group discussions about questions and “take-aways” | | |
| 15:30-16:00 | Refreshment Break | | |
| 16:00-17:00 | Panel Q&A No. 2 – Safety and Security | | |
| 08/07/2016 - Friday | | | |
| 09:00-10:00 | Small and medium size reactors | Sung-Kyun Zee | KAERI |
| 10:00-10:30 | Refreshment Break | | |
| 10:30-11:30 | Korean experience in NPP development and supply chain challenges | JaeKyu Lee | KEPCO E&C |
| 11:30-12:00 | Nuclear transport | Serge Gorlin | World Nuclear Association |
| 12:00-14:00 | Lunch | | |
| 14:00-14:30 | Country case studies | Milton Caplan | MZ Consulting |
| 14:30-15:00 | Effective communication with the public | Serge Gorlin | World Nuclear Association |
| 15:00-15:30 | Refreshment Break | | |
| 15:30-16:00 | Group discussions about questions and “take-aways” | | |
| 16:00-16:30 | Panel Q&A No. 3 – Nuclear Technology | | |
| 16:30-17:00 | Certificate and closing | | |

Lecturers Information

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|--|--|---|---|
|  | <p style="text-align: center;">Serge Gorlin</p> <p>Director of Industry, Cooperation at the World Nuclear Association, Representing WNU, Author of "Nuclear English" book</p> |  | <p style="text-align: center;">Milton Caplan</p> <p>President MZ Consulting Inc., Chair of the World Nuclear Association Economics Working Group</p> |
|  | <p style="text-align: center;">Abel J. Gonzalez</p> <p>Representative at the UNSCEAR. Member of the IAEA-CSS, Senior Advisor to the Nuclear Regulatory Authority of Argentina</p> |  | <p style="text-align: center;">Myung-Choon Lee</p> <p>General Manager Nuclear Safety Planning Team Safety Department Korea Hydro & Nuclear Power Co., LTD</p> |
|  | <p style="text-align: center;">Sung-Kyun Zee</p> <p>Distinguished Research Fellow, SMART Development Korea Atomic Energy Research Institute</p> |  | <p style="text-align: center;">Jae Kyu Lee</p> <p>Senior Vice President (Professor), Human Resource Development Center, KEPCO Engineering & Construction Company</p> |

Sergio Gorlin

Serge Gorlin is Head of Industry Cooperation at the World Nuclear Association, the international trade association for nuclear energy based in London, England. His career in nuclear began as a translator and interpreter at British Nuclear Fuels (1996 – 2000). After a period as an independent consultant, he joined the World Nuclear Association as a Writer and Analyst in 2005. He assumed his current role in 2013. Within World Nuclear Association, Serge is responsible for the World Nuclear Association's Working Groups - forums for global industry cooperation on nuclear issues – and takes a leading role on trade and transport issues. Outside World Nuclear Association, he is a member of the IAEA's Transport Safety Committee (TRANSSC), as well as a former Chairman of the International Steering Committee on Denial of Shipments, convened by the IAEA between 2006 and 2013. In 2005, Serge published a textbook for learners of English working in the nuclear field entitled Nuclear English (WNU Press). It remains widely used at companies, research institutes and universities worldwide. Serge has a bachelor's degree in Russian Studies from the University of Sheffield and a Master's Degree in Translation from the University of Kent.

Abel González

Abel J. González has worked in radiation protection for the last four decades, most recently as Director of Radiation, Transport and Waste Safety, the senior radiation safety official of the International Atomic Energy Agency (IAEA). Previously, in his native Argentina, he was a Director of the Argentine National Atomic Energy Commission and President of the Argentine Nuclear Power Plant Corporation. He is a founding member of the Argentine Radiation Protection Society.

Mr. González was a member of International Commission on Radiological Protection (ICRP) Committee 4 from 1978 to 2000 and is currently an ICRP commissioner, member of the ICRP Main Commission. He is one of the longest serving participants of the United Nations Committee on the Effects of Atomic Radiation (UNSCEAR). He is also member of the IAEA Commission on Safety Standards.

He has been honoured with a number of awards, notably: the IAEA Distinguished Service Award in recognition of his work for the International Chernobyl Project; the Morgan Award of the Health Physics Society (twice); the Lauriston S. Taylor Award of the National Council on Radiation Protection and Measurements; and, most recently, the Sievert Award for outstanding contributions to the field of radiation protection. Mr. González graduated in 1964 from the University of Buenos Aires (UBA) with the highest diploma in engineering. In 1962, while still an undergraduate, he began his professional career as a staff member of the Argentine National Atomic Energy Commission (CNEA) specializing in the fields of radiation protection, safety of radioactive waste management and of radioactive materials transport, and related aspects of nuclear safety.

Milton Caplan

Milton Caplan is President of MZ Consulting Inc. He has more than 25 years senior experience in the nuclear industry primarily in the areas of project development, strategy formulation, business model development, economic assessment, project financing and contract negotiation. He has a very keen interest in issues related to the overall competitiveness of projects, and how deals will have to be structured to manage the risks.

Myung-Choon LEE

Mr. Lee acquired a bachelor's degree in Mechanical Engineering from Hongik University in 1983.

He has been working at Korea Hydro & Nuclear Power Co., LTD for 32 years after the graduation of Hongik University.

Currently he is in charge of the general manager of Nuclear Safety Planning Team in Safety Department in Quality & Safety Division since 2015. Prior to taking this position, he had worked as the director of Operation Office in Hanul #1 Nuclear Power Plant.

He has acquired such various knowledge and experience in the Nuclear Operating field.

Sung-Kyun Zee

Dr. Zee received a bachelor's degree in Material Science and Engineering from Seoul National University and Master's in Nuclear Engineering from The Ohio State University (1975 and 1979), and Ph.D's degree in Nuclear Engineering from North Carolina State University in USA (1987). Dr. Zee's professional career started at Korea Electric Power Corporation (KEPCO) after the graduation of Seoul National University in 1975. During 7 years with KEPCO from 1975 to 1981, he involved in nuclear power planning, construction and operation. After he earned his Ph.D degree in 1987, he joined Korea Atomic Energy Research Institute (KAERI) as a senior researcher. Since joining with KAERI, Dr. Zee has involved in and led various R&D projects; (1) Core Design/Analysis Team Leader (1987~1991) and Manager (1992~2002) for all Korean NPP fleet and SMART Core (2) Director of Reactor Engineering Division and Chief Engineer of SMART NSSS Design (2002~2006), (4) Vice President and Project Director of SMART Development (2006~2007). In late 2007, he was assigned as a principal research fellow and technical advisor to Advanced Reactor Development Institution of KAERI. Currently, Dr. Zee is a distinguished research fellow of SMART Development. From 1987 to present, Dr. Zee has continuously participated in knowledge transfer through education/training/lecture program. Dr. Zee involved in Core/Fuel Program of KEPCO International Nuclear Graduate School as an Adjunct Professor (2011~2014) and Education Advisory Committee Member (2015~Present). Dr. Zee has also presented series of graduate lecture course on nuclear fuel management and core analysis methodology to NE Department of North Carolina State University as a visiting scientist and adjunct professor (2012~2014). Dr. Zee's specialties are core design/analysis methodology and numerical reactor analysis.

Jaekyu Lee

Mr. Lee is a Senior Vice President at the Human Resource Development Center in KEPCO E&C since 2013. Prior to taking this position, he had been in charge of the business development & marketing department (2005~2012) and participated in the designing, engineering, construction and start-up of more than 10 nuclear power plant projects (1984~2004). His practice consists primarily of the implementation of nuclear engineering and, in particular, the extensive experiences in all aspects of nuclear power project including overseas business development, engineering, commissioning, feasibility study, bidding process, negotiation and contract.

He has acquired such various nuclear project knowledge and experience through the Korean YGN 1&2 NPP Project, UCN 3&4 NPP Project, YGN 3&4 NPP Project, OPR100 NPP Project and Shin-Kori 1&2 NPP Project.

He is a Mechanical Professional Engineer(PE) and a member of the Korean Professional Engineer Association.

Venue Information

Geon-Seol-He-Gan

Address : Construction Bldg., 711, Eonju-ro, Gangnam-gu, Seoul, Republic of Korea

Tel: 02) 3449-8888

- Metro
 - line 7(Hak-dong station) gate 10
 - line 3(ApGuCheong station) gate 3
- Bus (SeGwan station)
 - 141, 401, 640, 145, 440
 - 3011, 3414, 4431, 6411, 4212
 - 41

