WNU Course on

" Key Issues in the World Nuclear Industry Today "

한국원자력연구원에서는 세계원자력대학(World Nuclear University)과 협력하여 “세계 원자력산업의 핵심 이슈”에 관한 WNU 원자력 교육과정을 다음과 같이 개최합니다.

□ 목 적

국제적 석학 및 전문가를 초청하여, 세계 원자력 산업의 현안 논의, 원자력 기술의 산업적 활용, 미래 원자력 기술 전망 및 비전 제시를 통하여 원자력 전문 인력의 역량의 함양

□ 개요

◦ 주최/주관 : 세계원자력대학(World Nuclear University)/한국원자력연구원
◦ 일　　시 : 2014년 5월 21(수)부터 5월 23일(금) 3일간
◦ 장　　소 : 건설회관 2층 중회의실(서울 강남구 논현동 71-2, 3호선 학동역 도보거리)

□ 수강대상

원자력 관련 기관 종사자 및 대학원생

□ 강사진

◦ 원자력 국제기구 전문가, 미국 대학교수, 세계적 원자력 산업체 CEO급 전문가

□ 공식 언어 : 영어

□ 수강신청

◦ 수강료 : 50만원
◦ 수강신청서를 우편 혹은 이메일로 접수
◦ 수강료 입금은 우리은행 087-074376-03-001 (예금주 : 한국원자력연구원) 계좌에 2014년 5월 13일까지 수강자 이름으로 입금 후 이메일 혹은 전화로 담당자에게 통보
◦ 영수증은 개강당일 일괄 발급
◦ 문의 및 제출 : 대전광역시 유성구 대덕대로 989번길 111 한국원자력연구원 국제교육팀
권연경
Tel (042-868-2677), E-mail (ygkwon@kaeri.re.kr)

※ 한국원자력연구원 수강자는 교육학점(24) 인정됩니다

세계원자력대학 강좌

"세계원자력산업의 핵심 이슈"

21 May (Wed)

09:00-09:15 Opening Ceremony
09:15-09:30 Introduction to the WNU and to the Course, *P. Wieland*
09:30-10:30 Nuclear power in the World Energy Context, *F. Perchet*
10:30-11:00 Refreshments
11:00-12:30 Nuclear Industry Infrastructure and Nuclear Development Globally, F. Perchet
12:00-13:30 Lunch
13:30-14:30 Nuclear Fuel Market, *M. Caplan*
14:30-15:00 Refreshments
15:00-16:20 Nuclear Economics, *M. Caplan*
16:20-16:40 Refreshments
16:40-17:30 Nuclear Project Structuring and Financing, *M. Caplan*

22 May (Thu)

09:00-10:30 International Radiation Safety Regime. Safety, Security and Safeguard, *A. Gonzalez*
10:30-11:00 Refreshments
11:00-12:00 Lessons from the Major Nuclear Accidents: Feedback into the International Safety Regime, *A. Gonzalez*
12:00-14:00 Lunch
14:00-15:00 Nuclear Safety Research for Prevention and Mitigation of Severe Accidents, *C. Song*
15:00-15:30 Refreshments
15:30-17:00 Comparison of the Nuclear Development in Different Countries: Case study A: Vietnam, Bangladesh, Philippines, UAE, Turkey, India *M. Caplan*

23 May (Fri)

09:00-10:15 Reactor Technology Development, *F. Perchet*
10:15-10:30 Refreshments
10:30-11:30 NPP Technology Selection Criteria, *M. Caplan*
11:30-12:30 Comparison of the Nucelar Development in Differnent Countries: Case Study B: USA, China, Korea, UK and France, *F. Perchet*
12:30-14:00 Lunch

14:00-15:00 Small and Medium Reactor, *K. Kim*

15:00-15:45 Medical and Industrial Applications of Radiation Technology, *S. Jeong*

15:45-16:00 Refreshments

16:00-16:30 Nuclear Communications, *P. Wieland*

16:30-17:00 Knowledge Management, *P. Wieland*

17:00-17:15 Closing

※ 전 과정 영어로 진행

Lecturers

	**Patricia Wieland** Head of the World Nuclear University Vice-President of the Brazilian Nuclear Energy Association , 세계원자력대학 국장 ,브라질원자력에너지협회 부대표		**Abel J. Gonzalez** Representative at the UNSCEAR. Member of the IAEA-CSS, Senior Advisor to the Nuclear Regulatory Authority of Argentina UN 과학위원회 아르헨티나 대표, IAEA-안전기준위원회(CSS) 위원, 아르헨티나 원자력규제국 수석고문
	**Francois Perchet** Former Senior Technical Advisor at WNA with broad expertise at French EDF in Nuclear Generation and Engineering; Mentor of the WNU Summer Institute from 2009 to 2011 전 세계원자력협회 수석기술고문, 원자력 발전 및 공학 전문가(프랑스 전력공사 , EdF)		**Milton Caplan** President MZ Consulting Inc. Chair of the WNA Economics Working Group MZ 컨설팅 대표, 세계원자력협회 경제워킹그룹 의장
	**Keung Koo Kim** Director, SMART PM Advanced Reactor Development, Korea tomic Energy Research Institute 한국원자력연구원 소형원자로 개발단 SMART개발부장		**Chul-Hwa Song** Director, Thermal Hydraulics Safety Research Division, Korea Atomic Energy Research Institute 한국원자력연구원 원자력안전연구본부 열수력안전연구부장
	**Sung In Jeong** Senior Researcher Korea Atomic Energy esearch Institute 한국원자력연구원 첨단방사선연구소 공업환경연구부 선임연구원		

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 commisioner, 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.

François Perchet

He joined the World Nuclear University Coordinating Centre (WNU-CC) in London in 2008. He is working there as a secondee from his French parent company, EDF.

His 34 year-long professional experience in the nuclear Industry ranges from direct involvement in on site commissioning of early EDF PWR NPPs in the late 1970's and early 1980's, to Operation, Maintenance and Safety management positions, at various French PWR Plants and corporate Engineering Divisions. He was for example Operation group manager at Blayais NPP, for two 900 Mwe PWR Units in 1986, and Deputy Director for Maintenance and Outages for the Chinon site 4 X 900Mwe units. He was RCM – Reliability Centred Maintenance – Project manager in 1996, and in charge of Information

System management group at EDF Nuclear Generation in 2001. Later on, as a Safety and Quality director at one of EDF Engineering operational division, he became acquainted with ISO 9000 and 14000 certification and nuclear Safety issues surrounding whole EDF Fleet Spare Parts management and Fleet wide so called Generic Maintenance.
He has some international experience, through his past two-year assignments in the USA (at the Institute of Nuclear Power Operation - INPO in 1989-1991) and in China (Senior Technical Advisor in Daya Bay / Ling Ao Nuclear Power Station in 2006-2008).
At WNU, he was involved as a mentor during the 2009, 2010 and 2011 WNU Summer Institute held in Christ Church, Oxford. He also acts as a Technical Advisor at the World Nuclear Association for various Working groups. He is a visiting lecturer in MSc at Imperial College of London. He graduated in 1976 from one of the leading Engineering Schools in France, "Ecole Supérieured' électricité".

Keung Koo Kim

Dr. Kim received a bachelor's degree and Master's in Nuclear Engineering from Seoul National University (1981 and 1983) and Ph.D's degree in Nuclear Engineering from M.I.T in USA(1992).
Dr. Kim worked at Korea Atomic Energy Research Institute for 8 years after the graduation of Seoul National University. Then he moved to USA for further study. After the Ph.D degree, he joined Korea Atomic Energy Research Institute again as a senior researcher.
Dr. Kim started his career involving Wolsung NPP (PHWR) fuel technology localization project After success of fuel development project, he joined the HANARO(Korean Research Reactor) design and construction team. In 1997, HANARO construction was completed, Dr. Kim joined the SMART development project. Currently he is a SMART Project Manager. His specialties are system dynamic analysis, and advanced control system design.

Chul-Hwa Song

He is working for KAERI since 1985, and currently working as the Director of the Thermal Hydraulics Safety Research Division. He stayed in CEA-Grenoble as a visiting researcher during 1987-1989. He has been involved mainly in the developments of advanced light water reactors such as APR 1400, APR+and SMART, especially in the fields of developing new safety features and also evaluating and verifying the thermal-hydraulic safety and performances. He received his BS and MSc form Dept. of Mechanical Eng. of Han Yang University, respectively and Ph.D from Dept. of Nuclear Eng. of KAIST. He was appointed as a Tenured Researcher of KAERI in 2011. He is a lifetime member of KNS, KSME, ANS and ASME. He is a council member of KNS/KSME and a member of Executive Committee of ANS Thermal-Hydraulics Division. And recently he was appointed as a member of Professional Divisions Committee of ANS. He received a Technical Achievements Award from KNS in 2004. He is working for OECD/NEA/CSNI as a bureau member and Korean

representative of the Working group of Analysis and Managements of Accidents(WGAMA). He is the executive editor of Nuclear Engineering and Technology(NET), and a member of international advisory board of two international journals: Nuclear Engineering and Design(NED) and Journal of Nuclear Science and Technology(JNST). He has got the medal of industries and the prime minister award from the Korean government for his contributions to nuclear safety enhancement. His research interests include nuclear thermal-hydraulics and safety, gas-liquid two-phase flow, and advanced measuring techniques for two-phase flow. He chaired technical program committees and organization committees of a variety of international conferences.

Sung In Jeong

Dr. Sung In Jeong received his B.S. degree in Polymer Science and chemistry from Pai-Chai University (2001), and his M.S. (2003) and Ph.D, (2008) degrees from Hanyang University in Chemical Engineering in South Korea. He held postdoctoral positions at the Case Western Reserve University (2008-2011) and at the Korea Atomic Energy Research Institute (2012). He is currently working as a Senior Researcher in Chemical Engineering, Biomedical Engineering, and Biologic & Materials Sciences for Advanced Radiation Technology Institute at Korea Atomic Energy Research Institute since 2013. Research in his laboratories is focused on elucidating the mechanisms by which cells receive information from materials, and utilizing this information to design new biomaterials that precisely regulate cellular gene expression using radiation technologies. The resultant biomaterials are currently being tested in a variety of drug delivery and tissue engineering applications. His current research activities are focused on elucidating interactions between biomaterials and cells, degradable polymeric scaffolds, and delivery of growth factors for tissue engineering using radiation technologies.

Venue Information

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· 141, 401, 640, 145, 440

· 3011, 3414, 4431, 6411, 4212

· 41

· 6704