

Ⅲ. 분과별 논제 및 발표자

제 1 분과 A

원자로시스템기술(Reactor System Technology)

- 제4세대 원자로 시스템 설계(Gen-IV Reactor System Design)

좌 장 김인구(In-Goo Kim), 김민환(Min-Hwan Kim)

발표장소 다산룸

일 정 | 5. 26(목)

- 09:00 LBE-cooled Natural-circulation Small Modular Reactor without on-site Refueling**
Jae Hyun Cho, Sungeol Choi, Moo-Hoon Bae, Jun Lim, Dina Puspitarini, Ji Hoon Jeun, Han-Gyu Joo, and Il Soon Hwang(SNU)
- 09:20 Analysis of the Nonlinear Density Wave Two-phase Instability in a Steam Generator of 600MWe Liquid Metal Reactor**
Seok-Ki Choi and Seong-O Kim(KAERI)
- 09:40 Core Thermal-hydraulic Design of a Sodium Cooled Fast Reactor for the U/TRU Fuel Modification**
Sun Rock Choi, ChungHo Cho, Young-Gyun Kim, Hoon Song, Wonseok Park, and Sang-Ji Kim(KAERI)
- 10:00 Component Modeling Description for COMMIX Analysis of 600MWe Sodium-cooled Fast Reactor**
Ji-Woong Han, Jae-Hyuk Eoh, and Seong-O Kim(KAERI)
- 10:20 Pre-test CFD Analysis of a Bypass Flow Experiment for VHTR Simulation**
Churl Yoon and Min-Hwan Kim(KAERI)
- 10:40 Coffee Break**
- 11:00 Preliminary Calculations of Bypass Flow Distribution in a Multi-block Air Test**
Min-Hwan Kim and Nam-il Tak(KAERI)
- 11:20 Pressure Drop of Hybrid Heat Exchanger for SO_3 Decomposition**
Chan Soo Kim, Dong-Un Seo, Tae-Ho Yoo, Sung-Deok Hong, and YongWan Kim(KAERI)
- 11:40 CFD Analysis for Predicting Flow Resistance of the Cross Flow Gap in Prismatic VHTR Core**
Jeong-Hun Lee, Su-Jong Yoon, and Goon-Cherl Park(SNU)
Jong Woon Park(DU)
- 12:00 Design Optimization of A PCHE Using RSA Model**
Sang-Moon Lee and Kwang-Yong Kim(INHA Univ.,)
- 12:20 Parametric Study on an Outlet Plenum of the PBMR**
Jae-Woo Ju, Sang-Moon Lee, and Kwang-Yong Kim(INHA Univ.,)

제 1 분과 B

원자로시스템기술(Reactor System Technology)-Poster

- 고온가스 냉각로 시스템(Gas-cooled Reactor System)

좌 장 김용완(Yong Wan Kim), 김민환(Min-Hwan Kim)

발표장소 주목홀

일 정 | 5. 26(목) 13:00-15:00

P01B01 High-temperature Structural Analysis Modeling on the Small-scale PCHE Prototype

Keenam Song, S-D Hong, and H-Y Lee(KAERI)

H-Y. Park(AD solution)

P01B02 Simulation of a Heat Transfer between Gases in SO₃ Decomposer

J. H. Kim, T. H. Lee, K. Y. Lee, and Y. W. Kim(KAERI)

P01B03 Viscosity Properties of Chemical Mixture Streams for the VHTR - based SI Process

Youngjune Lee, Youngjoon Shin, Taehoon Lee, Kiyoung Lee, Yongwan Kim, and Jonghwa Chang(KAERI)

P01B04 A Dynamic Simulation Program for a Hydriodic Acid Concentration and Decomposition Process in the VHTR-SI Process

Jiwoon Chang, Youngjoon Shin, Taehoon Lee, Kiyoung Lee, Yongwan Kim, and Jonghwa Chang(KAERI)

Cheong Youn(CNU)

P01B05 Regulatory Perspective on VHTR Dust Safety Issue

Namduk SUH and Changwook HUH(KINS)

P01B06 Improvements in the Modeling Capability of the Whole-Core Thermo-fluid Analysis of Prismatic Gas-cooled Reactors

Nam-il Tak, Min-Hwan Kim, Hong Sik Lim, and Jae Man Noh(KAERI)

Ⅲ. 분과별 논제 및 발표자

제 1 분과 C

원자로시스템기술(Reactor System Technology)

- 제4세대 원자로 시스템 기기(Gen-IV Reactor System Components)

좌 장 김용완(Yong Wan Kim), 김영인(Young-In Kim)

발표장소 단재룸

일 정 | 5. 26(목)

- 09:00 Comparison of High Temperature Elastic Modulus of Selected Nuclear Graphites**
Eung-Seon Kim and Sung-Deok Hong(KAERI)
- 09:20 Development of Process Heat Exchanger (PHE) for Nuclear Hydrogen Production System**
Jae-Won Park, Hyung-Jin Kim, Sunmog Yeo, and Sung-Deok Hong(KAERI)
- 09:40 Gamma Energy Production Analysis in KALIMER-600 Core**
Min-Ho Baek, Won S. Park, Sang-Ji Kim, and Jaewoon Yoo(KAERI)
- 10:00 The Preliminary Test of the Annular Linear Induction EM Pump**
Hee Reyoung Kim, Byung Hae Choi, Jong-Hyeun Choi, and Yong Bum Lee(KAERI)
- 10:20 Development of a Large Cold Trap Design Technology-I**
Jong-Hyeun Choi, Jong-Man Kim, Ji-Young Jeong, Tae-Joon Kim, and Yong-Bum Lee(KAERI)
- 10:40 Coffee Break**
- 11:00 Water Mock-up for the Sodium Waste Treatment Process**
Ho-Yun Nam, Jong-Man Kim, Byung-Ho Kim, and Yong-Bum Lee(KAERI)
- 11:20 Investigation of Sodium-CO₂ Interaction in Advanced SFR Power Conversion System**
Jae Hyuk EOH, Yong-Bum LEE, and Seong-O KIM(KAERI)
Hee Cheon NO(KAIST)
- 11:40 Multi-target Wastage Phenomena on Steam Generator Tubes during an SWR Event**
Ji-Young Jeong, Jong-Man Kim, Tae-Joon Kim, Jae-Hyuk Eoh, Jong-Hyeun Choi, and Yong-Bum Lee(KAERI)
- 12:00 Testing of Electromagnetic Flow Rate Transducer Used at Sodium Thermal Hydraulic Test Facilities in KAERI**
Tae-Joon Kim, Jae-Hyuk Eoh, In-Koo Hwang, Ji-Young Jeong, Jong-Man Kim, Byoung-Hae Choi, Yong-Bum Lee, Yeong-il Kim, and DoHee Hahn(KAERI)
- 12:20 Design Study on the Rotating Plug Size of an Advanced SFR Demonstration Plant**
S. H. Kim and J. B. Kim(KAERI)

제 1 분과 D

원자로시스템기술(Reactor System Technology)-Poster - 액체 금속로 시스템(Liquid-Metal Reactor System)

좌 장 이보욱(Bo Wook Rhee), 장진욱(Jinwook Chang)

발표장소 주목홀

일 정 | 5. 26(목) 13:00-15:00

- P01D01 Comparison Study on Finite Element Model for Modal Analysis of the SFR High Temperature Piping**
Chang-Gyu PARK and Jong-Bum KIM(KAERI)
- P01D02 FEM Simulations of Leaky Lamb Wave in Ultrasonic Waveguide Sensor**
Jin-Ho Bae, Young-Sang Joo, and Jong-Bum Kim(KAERI)
- P01D03 High Temperature Fatigue Crack Growth Tests for Mod.9Cr-1Mo Steel at 0.1 Hz Loading Frequency**
Jong-Bum Kim, Chang-Gyu Park, and Hyeong-Yeon Lee(KAERI)
Jong-Hoon Lee and Bum-Joon Kim(SKKU)
- P01D04 Core Design of a 600 MWe Uranium Fueled TRU Burner Reactor**
Hoon Song, Won Seok Park, and Sang Ji Kim(KAERI)
- P01D05 Radial Core Expansion Reactivity Model in Limited Free-Bowing Reactor Constraint System**
Young-Min KWON, Kwi-Lim LEE, Kwi-Seok HA, Hae-Yong JEONG, and Won-Pyo CHANG(KAERI)
- P01D06 Top-tier Design Requirements of a SFR Demonstration Plant Developing in KAERI**
Lee, Jae-Han and Kim, Young-Il(KAERI)
- P01D07 Scoping Test of a Water Scaled Model for the Thermal Hydraulic Study of 600MWe-SFR**
J. E. Cha, S. H. Lim, H. W. Kim, S. O. Kim, and Y. I. Kim(KAERI)
- P01D08 Investigation on Nodalization for Analysis of SFR Channel Blockage Accidents**
Won-Pyo Chang, Young-Min Kwon, Ki-Suk Ha, Kwi-Lim Lee, and Hae-Yong Jeong(KAERI)
- P01D09 Prototype Ultrasonic Waveguide Sensor Modules for Under-Sodium Inspection of Sodium-cooled Fast Reactor**
Young-Sang Joo, Jin-Ho Bae, Chang-Gyu Park, and Jong-Bum Kim(KAERI)
- P01D10 The Development of LBE Integral Test Loop, HELIOS and Tests by Using HELIOS**
Sung Min Kim, Jae Hyun Cho, and Il Soon Hwang(SNU)
- P01D11 Performances of DHRs in the KALIMER and the Sodium-cooled DFR**
Kwi-Seok Ha, Hae-Yong Jeong, Won-Pyo Chang, Young-Min Kwon, and Kwi-Lim Lee(KAERI)
- P01D12 Experimental Evaluation of Natural Convection Loop for Liquid Gallium**
Sarah Kang, Seung Won Lee, Sung Dae Park, In Cheol Bang, and Ji Hyun Kim(UNIST)
- P01D13 Investigation of Nanofluids with Liquid Gallium as a Base Fluid for Nuclear Applications**
Seung Won Lee, Sung Dae Park, Sarah Kang, Ji Hyun Kim, and In Cheol Bang(UNIST)

Ⅲ. 분과별 논제 및 발표자

제 1 분과 E

원자로시스템기술(Reactor System Technology)

- 물냉각 원자로 시스템 및 공정열 이용 (Water Reactor System and Process Heat Application)

좌 장 신영준(Young Joon Shin), 김한곤(Han-Gon Kim)

발표장소 다산로

일 정 | 5. 27(금)

- 09:00 Power Control for a Research Reactor Using MATLAB/SIMULINK**
Taewan Noh(HONGIK Univ.),
Dane Baang, Sungjin Kim, and Chang Je Park(KAERI)
- 09:20 Hybrid High Pressure Safety Injection Tank for SBO**
Tae-Soon Kwon, Dong-Jin Euh, Jun-Ho Bae, and Chun-Kyung Park(KAERI)
- 09:40 Core Cooling Assessment of SMART against Severe Station Blackout Accident Scenarios**
Won Jae Lee and Hark Rho Kim(KAERI)
- 10:00 Safety Philosophy in Process Heat Plants Coupled to High Temperature Reactors**
Nicholas R. Brown and Shripad T. Revankar(Purdue Univ.,)
- 10:20 Chemical Plant Accidents in a Nuclear Hydrogen Generation Scheme**
Nicholas R. Brown and Shripad T. Revankar(Purdue Univ.,)
- 10:40 Coffee Break**
- 11:00 CFD Analysis for SRI's H₂ Explosion Test at the Stoichiometry Condition in an Open Space**
Hyung Seok Kang, Sang Baik Kim, and Min-Hwan Kim(KAERI)
Hee Cheon NO(KAIST)
- 11:20 Modeling of the Sulfuric Acid and Sulfur Trioxide Decomposer Using Aspen Plus**
DongUn Seo and GoonCherl Park(SNU)
ChanSoo Kim, TaeHo Yoo, SungDeok Hong, and YongWan Kim(KAERI)

제 1 분과 F

원자로시스템기술(Reactor System Technology)-Poster - 물냉각 원자로 시스템(Water Reactor System)

좌 장 류정수(Ryu, Jeong Soo), 이종호(Jong-Ho Lee)

발표장소 주목홀

일 정 | 5. 26(목) 13:00-15:00

- P01F01 A Study on the Electromagnet Thrust Force Characteristics of Newly Proposed Hybrid Bottom-mounted Control Rod Drive Mechanism for Research Reactor**
Hyung Huh, Yeong Garp Cho, Myoung Hwan Choi, Je Yong Yu, Ji Ho Kim, and Jong In Kim(KAERI)
- P01F02 Design of Information Processing System for Research Reactor**
Jae Kwan Park, Young Jun Lee, Jung Taek Kim, Gee Yong Park, and Young Ki Kim(KAERI)
- P01F03 Numerical Study on the Effect of the Bottom Gap on the Wet Thermal Insulator Performance**
Seong Hoon Kim, Jung Yoon, Chun Tae Park, and Young Jong Chung(KAERI)
- P01F04 Modified Design of Reactor Regulating System for Research Reactor**
Sang Hoon Bae, Dane Baang, Gee Yong Park, Young San Choi, and Young Ki Kim(KAERI)
- P01F05 Prediction Model of the HANARO Primary Cooling Pump Cooldown**
Hyun-Gi Yoon, Young-Chul Park, Kyoung-Woo Seo, and Dae-Young Chi(KAERI)
Il-Soo Yoo(KIMM)
- P01F06 Estimation on a Siphon Breaker Type of a Research Reactor**
Kyoungwoo Seo, Kwon-Yeong Lee, Hyungi Yoon, Namgyun Jeong, Young-Chul Park, Dae-Young Chi, and Juhyeon Yoon(KAERI)
- P01F07 An Analysis of the Reflector Cooling System Repair Status after the Initial Operation of HANARO**
Young-Chul Park, Kyoung-Woo Seo, Dae-Young Chi, and Hyun-Gi Yoon(KAERI)
Jung-Geun Park(System D&D Co. Ltd.,)
- P01F08 Hydraulic Analysis of SMART Fuel Assembly**
Tae Woo Kim, Seong Jin Kim, Jeong Hun Cha, Kyong Won Seo, Hyuk Kwon, and Dae Hyun Hwang(KAERI)
- P01F09 RELAP5/Mod3.3 and MARS3.0a Modeling of a Siphon Break Experiment**
Suki Park, Heonil Kim, Cheol Park, and Juhyeon Yoon(KAERI)
- P01F10 Evaluation of Thermal Margin Analysis Models for SMART**
Kyong-Won Seo, Hyuk Kwon, and Dae-Hyun Hwang(KAERI)
- P01F11 Prediction of the Pipe Diameter to Lift the Impurities in Nuclear Power Plants**
Hongyun So, Seong-Hoon Kim, Young-In Kim, and Cheon-Tae Park(KAERI)
- P01F12 Molten Fuel Mass Assessment for Channel Flow Blockage Event in CANDU6**
Kwangho Lee, Yong-Bae Kim, Hoon Choi, and Dong-Hwan Park(KEPCO RI)

Ⅲ. 분과별 논제 및 발표자

제 2분과 A

KNS-AESJ Joint Session on Nuclear Data, Reactor Physics and Computational Science

좌 장 노재만(Jae Man Noh), Mikio Tokashiki

발표장소 연암룸

일 정 | 5. 25(수)

- 13:30 Evaluation and Validation of New Cross Section and Covariance Data for AFC Applications**
Do Heon Kim, Choong-Sup Gil, Hyeong Il Kim, and Young-Ouk Lee(KAERI)
- 13:50 Reactivity Impact of Difference of Nuclear Data Library for PWR Fuel Assembly Calculation by Using AEGIS Code**
Yasunori Ohoka and Masahiro Tatsumi(NFI)
Naoki Sugimura and Masato Tabuchi(NE)
- 14:10 Effect of Drawer Master Modeling of ZPPR15 Phase A Reactor Physics Experiment on Integral Parameter**
Jaewoon Yoo and Sang-Ji Kim(KAERI)
- 14:30 Surrogate Reaction and Fission Research at JAEA**
S. Chiba, K. Nishio, H. Makii, Y. Aritomo, and S. Hashimoto(JAEA)
- 14:50 Few-Group Transport Analysis of the Core-Reflector Problem in Fast Reactor Cores via Equivalent Group Condensation and Local/ Global Iteration**
Jong Hyuck Won and Nam Zin Cho(KAIST)
- 15:10 Coffee Break**
- 15:20 Measurement of Neutron Capture Gamma Rays from the Resonances of ^{93}Zr at the J-PARC/MLF/ANNRI**
J. Hori, T. Fujii, S. Fukutani, and K. Takamiya(Kyoto Univ.,)
K. Furutaka, S. Goko, H. Harada, A. Kimura, T. Kin, F. Kitatani, M. Koizumi, S. Nakamura, M. Ohta, M. Oshima, and Y. Toh(JAEA)
M. Igashira, T. Katabuchi, and M. Mizumoto(TIT)
M. Furusaka, F. Hiraga, T. Kamiyama, K. Kino, and Y. Kiyanagi(Hokkaido Univ.,)
- 15:40 Qualification of McCARD/MASTER Code System for Yonggwang Unit 4**
Ho Jin Park, Hyung Jin Shim, Han Gyu Joo, and Chang Hyo Kim(SNU)
- 16:00 Search Strategy of Detector Position For Neutron Source Multiplication Method by Using Detected-Neutron Multiplication Factor**
Tomohiro ENDO(Nagoya Univ.,)
- 16:20 Implementation of the Gamma Transport Calculation Module in KARMA 1.2**
Kang-Seog Kim, Sung Jin Kim, Ser Gi Hong, and Jin Young Cho(KAERI)
- 16:40 Experiments on the Accelerator-Driven System (ADS) in the Kyoto University Critical Assembly (KUCA)**
Cheol Ho Pyeon, Jae-Yong Lim, Takahiro Yagi, and Tsuyoshi Misawa(Kyoto Univ.,)

제 2 분과 B

핵자료, 원자로물리 및 계산과학(I) (Nuclear Data, Reactor Physics and Computational Science(I))

좌 장 이영옥(Young-Ouk Lee), 김용희(Yonghee Kim)

발표장소 연암룸

일 정 | 5. 26(목)

- 09:00 A Cross-Section Adjustment Method for Double Heterogeneity Problem in VHTGR Analysis**
Sunghwan Yun and Nam Zin Cho(KAIST)
- 09:20 Development of the CAPP Code for the Analysis of Block Type VHTRs**
Hyun Chul Lee, Chang Keun Jo, and Jae Man Noh(KAERI)
- 09:40 Derivation of Condition for DPA Conservation in Kinetic Monte Carlo and Transport Monte Carlo Calculations for Neutron Irradiation Damage Estimation**
Yong Hee Cho and Han Gyu Joo(SNU)
- 10:00 Modification of Scattering Kernel for the Effective Parallel Processing in the Photon/ Electron Coupled Problem**
Jong Woon Kim and Young-Ouk Lee(KAERI)
- 10:20 Verification of a Subgroup Generation Method for PWR Fuel Pin with Am-241**
Aung Tharn Daing and Myung-Hyun Kim(KHU)
Han-Gyu Joo(SNU)
- 10:40 Coffee Break**
- 11:00 Validation of Sensitivity Coefficients Considering Indirect Effect**
Masahiro KIMURA, Takanori KITADA, Yosuke INOUE, and Michitaka Ono(Osaka Univ.,)
- 11:20 Research on an Efficient Preconditioner Using GMRES Method for the MOC**
Satoshi Takeda and Takanori Kitada(Osaka Univ.,)
Michael A. Smith(ANL)

Ⅲ. 분과별 논제 및 발표자

제 2 분과 C

핵자료, 원자로물리 및 계산과학(II) (Nuclear Data, Reactor Physics and Computational Science(II))

좌 장 심형진(Hyung Jin Shim), 양승태(Yang Sung-Tae)

발표장소 연암록

일 정 | 5. 27(금)

- 09:00 An Evaluation on the Pebble Flow Velocity in PBMR Core by Using Modified Kinematic Model**
Song Hyun Kim, Hong-Chul Kim, and Jong Kyung Kim(HYU)
Jae Man NOH(KAERI)
- 09:20 Technical Feasibility of Ultra Long Life Fast Reactor Concepts with Fuel Shuffling and Its Potential**
In Ho Bae, Jaewoon Yoo, and Sang Ji Kim(KAERI)
- 09:40 Monte Carlo Nuclear Data Uncertainty Analysis for VENUS-1 Criticality**
Ho Jin Park, Hyung Jin Shim, Han Gyu Joo, and Chang Hyo Kim(SNU)
- 10:00 A Case Study of Inaccuracy of Advanced SAM Application in the OPR1000**
Roh Kyung-Ho, Yang Sung-Tae, and Jung Ji-Eun(KHNP)
- 10:20 Reactor Physics Analysis and Generation of Flux Shapes by Enhanced ROP Methodology for Wolsong 2**
Sang-Rae Moon, Sung-Tae Yang, and Kyung-Ho Roh(KHNP)
- 10:40 Coffee Break**
- 11:00 Conceptual Design of a Neutron TOF Facility at KoRIA**
Cheol Woo Lee, Tae-Yung Song, Jaegwon Yoo, and Young-Ouk Lee(KAERI)
Gi-Dong Kim(KIGAM)
- 11:20 Neutronic Parametric Study on a Conceptual Design for a Transmutation Fusion Blanket**
M. Tariq Siddique and Myung-Hyun Kim(KHU)

제 2 분과 D

핵자료, 원자로물리 및 계산과학(III) - Poster (Nuclear Data, Reactor Physics and Computational Science(III))

좌 장 조범진(Beom Jin Cho), 차균호(Kyoon Ho Cha)

발표장소 주목홀

일 정 | 5. 26(목) 13:00-15:00

- P02D01 Review of the Decrease in the COLSS Reactor Coolant Flow caused by an Increase of the RCP Differential Pressure (DP)**
Jin-Won Son, Kyung-Ho Roh, and Sung-Tae Yang(KHNP)
- P02D02 Evaluation of Fuel Rod Performance in the APR+ Design**
Sang-Seob Lee, Ho-Rim Moon, and Young-Sheop Park(KHNP)
- P02D03 Implementation of Neutronics Analysis Code using the Features of Object Oriented Programming via Fortran90/95**
Tae Young Han and Beom Jin Cho(KEPCO NF)
- P02D04 Preliminary Steady State and Transient Analyses of SMART Reactor Core Using the COREDAX Code**
Jaejun Lee, Jong Hyuck Won, and Nam Zin Cho(KAIST)
Yong Ho Ryu and Ju Yeop Park(KINS)
- P02D05 CFD Study on Flow Distribution at the Core Inlet Region of SMART**
Youngmin Bae, Hongyun So, Yu Mi Jeon, Yeong-Gil Kim, Young-In Kim, Cheon-Tae Park, and Suhn Choi(KAERI)
- P02D06 Monte Carlo Simulation on Proton-Induced Fast Neutron Source**
Se-jin Ra, Myung Hwan Jung, and Kye-Ryung Kim(KAERI)
- P02D07 Sensitivity Calculation of Vanadium Self-Powered Neutron Detector**
Kyoon Ho, Cha(KEPCO RI)
- P02D08 APR1000 Core Design with 30% MOX Fuel Loading**
Hwan-Soo Lee, Yu Sun Choi, Seong Man Bae, and Keun-Bae Yoo(KEPCO RI)
- P02D09 Burn-up Calculation of the PBMR Core with Pebble Flow Velocity from Modified Kinematic Model**
Hong-Chul KIM, Song Hyun Kim, and Jong Kyung KIM(HYU)
Jae Man NOH(KAERI)
- P02D10 An Evaluation on Criticality Safety of Corium Arranged in a Core Catcher**
Song Hyun Kim, Jong Kyung Kim, and Chang Ho Shin(HYU)
Jin Ho Song and Tae Woon Kim(KAERI)
- P02D11 Analysis of Fluid Characteristics in AFWS by Coupling Strategy Using One-Dimensional and Three-Dimensional CFD Methods**
Nam-Seok Kim, Sang-Kyu Lee, Byung-Soo Shin, and O-Hyun Keum(KINS)
- P02D12 MARS-KS Assessment of TRACE Fundamental Problems**
Won Joon Chang, D. -H. Yoon, N. -S. Kim, S. Y. An, B. -S. Shin, S. H. Ahn, and Kwang-Won Seul(KINS)

Ⅲ. 분과별 논제 및 발표자

제 3분과 A

방사성폐기물관리 - Poster (Radioactive Waste Management)

좌 장 정해룡(Haeryong Jung), 방경식(Kyoungsik Bang)

발표장소 주목홀

일 정 | 5. 26(목) 13:00-15:00

- P03A01 Laser Removal of Contaminants from Aluminum Surface Using Q-switched Nd:YAG Radiation at 1064,532 and 355nm**
Sun-Hee Jung, Hui-Jun Won, Byung-Seon Choi, Jei-Kwon Moon, Chong-Hun Jung, and Kune-Woo Lee(KAERI)
- P03A02 Redox Reactions and Sorption of Selenite (Se^{IV}) on Chlorite Surface**
Min-Hoon Baik and Tae-Yup Lee(KAERI)
- P03A03 The Development of Treatment Process Technology for Uranium Soil Washing Leachate**
Dong-Bin Shon, Gye-Nam Kim, Hye-min Park, Ki-Hong Kim, Ki Won Lee, and Jeik won Moon(KAERI)
- P03A04 Silica-based Chemical Gel for Decontamination of Cs and Co**
Chong Hun Jung, C. K. Kim, B. S. Choi, J. K. Moon, H. J. Won, and K. W. Lee(KAERI)
- P03A05 Decommissioning Work-unit Productivity Calculation System**
S. K. Park, W. H. Cho, J. H. Park, and J. K. Moon(KAERI)
- P03A06 Remediation of Soil Contaminated with Uranium Using a Biological Method**
Hye-Min Park, Gye-Nam Kim, Dong-Bin Shon, Ki-Won Lee, Un-Soo Chung, and Jai-Kwon Moon(KAERI)
- P03A07 Kinetic Approach for Interactive Reactions of Radionuclide, Bacteria and Granitic Crushed Rock**
Jung-Woo Kim, Min-Hoon Baik, Seung-Yeop Lee, Jae-Kwang Lee, Seung-Soo Kim, Jong-Min Oh, and Tae-Yup Lee(KAERI)
- P03A08 A Study on Gamma Spectrum Simulation from Natural Uranium**
Yos Sitompul, Junsik Park, Se-Hwan Park, and Shin Hee Sung(KAERI)
- P03A09 Chemical Analysis and Volume Reduction of Radioactive HEPA Filter Waste**
In-Ho Yoon, Wang-Kyu Choi, Suk-Chol Lee, Byung-Youn Min, Hee-Chul Yang, and Kun-Woo Lee(KAERI)
- P03A10 A Method for Cobalt and Cesium Leaching from Glass Fiber in HEPA Filter**
Gye-Nam Kim, Suk-Chol Lee, Hee-Chul Yang, In-Ho Yoon, Wang-Kyu Choi, and Jei-Kwon Moon(KAERI)
- P03A11 Performance Test of the Remote Operation Light Ablation Decontamination System**
Hui-Jun Won, Sun-Hee Jung, Chong-Hun Jung, Byung-Seon Choi, Kune-Woo Lee, and Jei-Kwon Moon(KAERI)

제 3 분과 B

방사성폐기물관리 - Poster (Radioactive Waste Management)

좌 장 정해룡(Haeryong Jung), 방경식(Kyoungsik Bang)

발표장소 주목홀

일 정 | 5. 26(목) 13:00-15:00

- P03B01 Development of a Computer Program for Nuclear Measuring and Monitoring System in the Pyroprocess Integrated Inactive Demonstration (PRIDE)**
Sun-Soo Choi, Dae-Yong Song, Hee-Sung Shin, and Ho-Dong Kim(KAERI)
- P03B02 Immobilization of LiCl-KCl Waste by an Inorganic Composite Composing of Silicate and Phosphate Compounds**
Hwan-Seo Park, In-Hak Cho, Su-Na Ahn, In-Tae Kim, Byeung-Gil Ahn, and Yong-Zun Cho(KAERI)
- P03B03 Stability Analysis of Buffer Storage Large Basket and Temporary Storage Pre-packaging Basket Used in the Type B Radwaste Process Area**
Sung-Kyun Kim, Kune-Woo Lee, and Jei-Kwon Moon(KAERI)
- P03B04 The Oxidation of Uranium Dioxide in Dry Storage**
Soyoung Kim and Kwangheon Park(KHU)
- P03B05 Dechlorination Reaction of Metal Chloride Wastes with Inorganic Composite ($\text{SiO}_2\text{-Al}_2\text{O}_3\text{-P}_2\text{O}_5$) at 650°C**
Soo-Na Ahn, Hwan-Seo Park, In-Hak Cho, In-Tae Kim, and Yong Zun Cho(KAERI)
- P03B06 Characteristic of Dechlorination for LiCl Salt by the Surface Temperature-controlled Reactor**
In Hak Cho(CNU)
Hwan-Seo Park, Soo Na Ahn, Hee-Chul Eun, In-Tae Kim, and Yong-Jun Cho(KAERI)
- P03B07 Acid Dissolution of Depleted Uranium from Catalyst Using Microwave**
Jinhyun Sung, Seonggi Jeong, and Kwangheon Park(KHU)
- P03B08 Harmonization of a Pyroprocess System Engineering and Project Management**
Hee Seong Park, Young Choi, and Ho Dong Kim(KAERI)
- P03B09 The Study on the Formation of Cs-U-O Compounds in UO_2 Fuel**
Jong-Goo Kim, Seok-Young Lee, Yang-Soon Park, Yeong-Keong Ha, and Kyuseok Song(KAERI)
- P03B10 Computational Analysis on Electrorefining Process for Zirconium Recovery from PWR Spent Zircaloy-4 Cladding**
Jaeyeong Park, Sungyeol Choi, and Il Soon Hwang(SNU)
Kwang-Rag Kim(KAERI)

Ⅲ. 분과별 논제 및 발표자

제3분과 C

방사성폐기물관리 (Radioactive Waste Management)

좌 장 정해룡(Haeryong Jung), 방경식(Kyoungsik Bang)

발표장소 주목홀

일 정 | 5. 27(금)

- 09:00 Evolution of ^{99}Tc Species in Cementitious Nuclear Waste Form**
Wooyong Um(POSTECH)
Joseph H. Westsik Jr.(PNNL)
- 09:20 Estimation of Cement Composition Using Thermodynamic Model in Subsurface Environment**
Kijung Kwon, Sungbok Lee, and Haeryong Jung(KRMC)
Do-Gyeum Kim(KICT)
Gyun Young Kim(KAERI)
- 09:40 Fabrication of Phosphate Cement with High Integrity**
Jae Hwan Yang, Chang Hwa Lee, Cheol Min Heo, Min Ku Jeon, and Kweon Ho Kang(KAERI)
- 10:00 Energy Transfer between U(VI) and Eu(III) Ions Adsorbed on a Silica Surface**
K. K. Park, W. Cha, H. -R. Cho, H. -J. Im, E. C. Jung, and K. Song(KAERI)
- 10:20 Spectroscopic Studies on Complex Formation of U(VI)-thiosalicylate**
Wansik Cha, Hye-Ryun Cho, Kyoung Kyun Park, and Eui Chang Jung(KAERI)
- 10:40 Coffee Break**
- 11:00 Microbiological Transformations of Low- and Intermediate-Level Radioactive Wastes**
A. J. Francis(POSTECH/BNL)
- 11:20 Study on Evaluation Scheme of Spent Fuel Structural Integrity Coupling of Cask System**
S. K. Lee, Y. S. Nam, K. S. Choi, and C. S. Cho(KEPCO NF)
- 11:40 Thermal Shielding Effects of a Damaged Shock Absorber and an Intact Shock Absorber**
K. S. Bang, J. C. Lee, K. Y. Kim, C. S. Seo, and K. S. Seo(KAERI)

제 4 분과 A

핵연료 및 원자력재료(Nuclear Fuel and Materials)

- 핵연료 및 피복관(Fuel & Cladding)

좌 장 박정웅(Park Jeong-Yong), 김용환(KIM, YONG HWAN)

발표장소 올곡룸

일 정 | 5. 26(목)

- 09:00 PWR Fuel Performance Issues and Fretting Wear Resistant Fuel Design**
YongHwan KIM(KEPCO NF)
- 09:20 Zirconium Alloy Cladding Tube Properties Made by KEPCO NF**
Yoon Ho Kim, Yong Kyoong Mok, Seung Jae Lee, Jae Ik Kim, and Kyeong Lak Jeon(KEPCO NF)
- 09:40 Fabrication of UO_2 Pellet Containing Shape-controlled Metallic Phase**
Dong-Joo Kim, Jae Ho Yang, Jong Hun Kim, Young Woo Rhee, Ik-Hui Nam, and Keon Sik Kim(KAERI)
- 10:00 Consideration of Breakaway Oxidation Mechanism of Fuel Cladding Tested at 1000°C**
Hyun-Gil Kim, Il-Hyun Kim, Byung-Kwan Choi, Sang-Yoon Park, and Jeong-Yong Park(KAERI)
- 10:20 Effects of Al_2O_3 -NiO on the Grain Growth and Thermal Properties of UO_2 Pellets**
Seung Jae Lee, Dong Hyun Jung, Young Ho Jo, Chung Yong Lee, Yeon Soo Na, Jae Ik Kim, Kyeong Lak Jeon, and Joon Ro Lee(KEPCO NF)
- 10:40 Coffee Break**
- 11:00 A PCMI Analysis for a DB-PWR Fuel Rod with TRISO-SiC Pellets**
Young Min Kim, W. J. Lee, M. S. Cho, and F. Venneri(KAERI)
- 11:20 Effect of Gas Flow Rate on the Microstructure and Properties of Silicon Carbide Layers in TRISO-Coated Particles**
Weon-Ju Kim, Yeon-Ku Kim, Moon Sung Cho, and Ji Yeon Park(KAERI)
- 11:40 Development of Growth and Bow Analysis Models for the PLUS7™ Fuel Assembly**
S. Y. Jeon, H. K. Kim, and B. J. Cho(KEPCO NF)
- 12:00 Development of Pilger Dies for Nuclear Zirconium Alloy Tubes**
Ki Bum Park, In Kyu Kim, Jong Yeol Kahng, and Sun Doo Kim(KEPCO NF)
Jae Soo Noh(KUT)

Ⅲ. 분과별 논제 및 발표자

제 4 분과 B

핵연료 및 원자력재료(Nuclear Fuel and Materials)

- 구조재료 건전성(Integrity of Structural Materials)

좌 장 황성식(Hwang Seong Sik), 이봉상(LEE, Bong-Sang)

발표장소 울곡룸

일 정 | 5. 27(금)

- 09:00 Oxide on Steam Generator Tube Materials in Alkaline Solutions**
Dong-Jin Kim, Hyun Wook Kim, and Hong Pyo Kim(KAERI)
- 09:20 Measurement of PWSCC Growth Rates vs. K in the Alloy 600/182 Weld**
Yun Soo Lim, Hong Pyo Kim, and Sung Sik Hwang(KAERI)
- 09:40 Research Program on Corrosion of Secondary Pipes in PWRs**
Seong Sik Hwang and Kyung Mo Kim(KAERI)
- 10:00 Mechanical Post Irradiation Examinations for SMART SG Tube Materials in a Hot Cell**
Sangbok Ahn, Seungjai Baik, Dosik Kim, Byungok Yoo, Yanghong Jung, Woongsub Song, Gilsoo Kim, Keenam Choo, Jinseok Park, Wonjae Lee, and Woo-seog Ryu(KAERI)
- 10:20 Creep Properties of Alloy 617 in Air and Helium Environments at 900°C**
Woo-Gon Kim, Song-Nan Yin, Gyeong-Geun Lee, Ji-Yeon Park, Sung-Deok Hong, and Yong-Wan Kim(KAERI)
- 10:40 Coffee Break**
- 11:00 Prediction of PT Diametral Creep for Wolsung NPPs**
Young Gyu No, Sim Won Lee, Dong Su Kim, Man Gyun Na, and Jae Yong Lee(CSU)
- 11:20 Combined Effect of Hydrogen and Dynamic Strain Aging on Low Cycle Fatigue Behaviors of SA508 Gr.1a Low Alloy Steels in 310°C Deoxygenated Water**
Hun Jang, Jeong Hyeon Kim, and Changheui Jang(KAIST)
Tae Soon Kim(KHNP)
- 11:40 Fracture Toughness in Transition Temperature Region with Cooling Rate for SA508 Gr. 4N Model Alloys**
Ki-Hyoung Lee, Sang-Gyu Park, and Dang-Moon Wee(KAIST)
Min-Chul Kim and Bong-Sang Lee(KAERI)
- 12:00 Effects of the Phase Fractions on the Carbide Morphologies, Charpy and Tensile Properties in SA508 Gr.4N High Strength Low Alloy RPV Steel**
Sang Gyu Park and Dang Moon Wee(KAIST)
Min-Chul Kim and Bong Sang Lee(KAERI)
- 12:20 Oxidation Behaviors of Ni-base Superalloys for Nuclear Hydrogen Production in Steam with and without Hydrogen Environments**
Donghoon Kim, Jahyun Koo, and Chang heui Jang(KAIST)
Daejong Kim(KAERI)
Young-Sung Yoo(KEPCO RI)

제 4 분과 C

핵연료 및 원자력재료(Nuclear Fuel and Materials)

- 재료개발 및 시험(Materials Development & Test)

좌 장 권준현(Kwon Junhyun), 김봉구(KIM Bong Goo)

발표장소 단재룸

일 정 | 5. 27(금)

- 09:00 Shape Optimization Analysis of the Bulge Tool**
Joo Young Yoo, Nam Gyu Park, Jung Min Suh, and Kyeong Lak Jeon(KEPCO NF)
- 09:20 Improvement of Conceptual Design of the IHTS Hot Piping Layout for SFR**
Gyeong-Hoi Koo and Jong-Bum Kim(KAERI)
- 09:40 Fabrication and Mechanical Properties of Silicon Carbide Micropillars**
Chansun Shin, Hyung-ha Jin, Junhyun Kwon, and Don Jin Kim(KAERI)
- 10:00 Application of 3 Step Heat Treatment to Improve Toughness of Main Steam Pipes in NPPs**
Yong Chan Jung, Keun Bae Yoo, Hyun Cheol Yu, and Hong Deok Kim(KEPCO RI)
- 10:20 Study of Irradiation Effects on the Fracture Properties of A533-Series Ferritic Steels**
Yongbok Lee, Gyeong-Geun Lee, and Junhyun Kwon(KAERI)
- 10:40 Coffee Break**
- 11:00 Irradiation Dose Dependence of Deformation and Fracture Characteristics for SA533B Steel**
Jin Weon Kim(CSU)
Thak Sang Byun(ORNL)
- 11:20 Measured Parameters of Nuclear Fuel during Irradiation Testing at the HANARO**
Bong Goo Kim, Dae Ho Kim, Jae Min Sohn, and Kee-Nam Choo(KAERI)
- 11:40 Fabrication of Nitride Coated U-Mo Powders for an Advanced Research Reactor Fuel**
Jae Soon Park, Yong Jin Jeong, Sang Oh Bae, Sun Chil Kwon, Eung Soo Kim, Se Jung Jang, Jong Man Park, Jong Hun Kim, and Jae Ho Yang(KAERI)
- 12:00 Results of the INPRO Collaborative Project, "Proliferation Resistance: Acquisition / Diversion Pathway Analysis"**
H. L. Chang and W. I. Ko(KAERI)

Ⅲ. 분과별 논제 및 발표자

제 4 분과 D

핵연료 및 원자력재료 I - Poster (Nuclear Fuel and Materials I)

좌 장 김동주(Dong-Joo Kim), 김시형(Kim, Si-Hyung)

발표장소 주목홀

일 정 | 5. 26(목) 13:00-15:00

- P04D01 Burst Behavior and Mechanical Characterization of Zr-based Alloys Cladding LOCA Conditions in PWRs**
Dong Jun Park, Jeong Yong Park, and Byoung Kwon Choi(KAERI)
- P04D02 Deformation Hardening in Cr-doped UO₂ Pellets**
Jae Ho Yang, Ik Hui Nam, Jong Hun Kim, Dong-Joo Kim, Young Woo Rhee, and Keon Sik Kim(KAERI)
- P04D03 Study on the Transport System for High Temperature Molten Salt Transport**
S. H. Lee, S. Y. Choi, S. J. Lee, H. S. Lee, and J. G. Kim(KAERI)
- P04D04 Measurement of Weight of Kernels in a Simulated Cylindrical Fuel Compact for HTGR**
Woong Ki Kim, Young Woo Lee, Young Min Kim, Yeon Ku Kim, Sung Ho Eom, Kyung Chai Jeong, Moon Sung Cho, Hyo Jin Cho, and Joo Hee Kim(KAERI)
- P04D05 Radioactive Waste Generation in Pyro-SFR Nuclear Fuel Cycle**
Fanxing Gao, Byung Heung park, and Won Il Ko(KAERI)
- P04D06 Optimal Experimental Environment for Flow-induced High Frequency Vibration Test Facility**
Dong-Geun Ha, Nam-Gyu Park, Jung-Min Suh, and Kyeong-Lak Jeon(KEPCO NF)
Won-Jae Lee(KAERI)
- P04D07 Calcination, Reduction and Sintering of ADU Spheres for HTGR Fuel**
Jeong Kyung Chai, Eom Sung Ho, Kim Yeon Ku, Kim Woong Ki, Kim Young Min, Lee Young Woo, Kim Ju Hee, Cho Hyo Jin, and Cho Moon Seoung(KAERI)
- P04D08 Effect of Cd on the Deposition Behavior of U and Nd in LiCl-KCl- UCl_3 -NdCl₃ Solution**
Si-Hyung Kim, Seungwoo Paek, Tack-Jin Kim, Dae Yeob Park, Joon-Bo Shim, Kwang-Rag Kim, Jae-Hoo Jung, and Do-Hee Ahn(KAERI)
- P04D09 Development of Regulatory Guides on the Evaluation and Inspection of RCS Branch Lines Subject to Thermal Fatigue**
Jeong Soon Park and Young Hwan Choi(KINS)

제 4 분과 E

핵연료 및 원자력재료 II - Poster (Nuclear Fuel and Materials II)

좌 장 이영우(Rhee young-woo), 이강희(Lee Kang Hee)

발표장소 주목홀

일 정 | 5. 26(목) 13:00-15:00

- P04E01 Vibration Pre-characterization of Partial Fuel Test Assembly**
Kang-Hee Lee, Heung-Seok Kang, Hyung-Kyu Kim, Kyung-Ho Yoon, Young-Ho Lee, and Jae-Yong Kim(KAERI)
- P04E02 An Experiment on Preparation of Matrix Graphite Powder for HTR Fuel Element**
Eun-Jung Shin, Young-Woo Lee, Woong Ki Kim, and Moon Sung Cho(KAERI)
- P04E03 Electromagnetic Acoustic Test of the Artificial Defects for a Plate-type Nuclear Fuel**
Hyun-Kyu Jung, Dong-Min Kim, Yoon-Sang Lee, and Yong-Moo Cheong(KAERI)
- P04E04 A Study on the Microstructure Change of Alloy 617 in Helium Environment at High Temperature**
Gyeong-Geun LEE, Sujin Jung, Daejong Kim, and Dong-Jin Kim(KAERI)
- P04E05 Grain Boundary Diffusion of Atomic Oxygen in Ni and Ni-Cr Binary Alloy Using Ab-initio Calculation Method**
Jong Jin Kim, Sang Hoon Shin, Jeong Seok Park, and Ji Hyun Kim(UNIST)
- P04E06 Fundamental Study of Seal Tube Welding for the LVDT Instrumentation**
Soo-Sung Kim, Chul-Yong Lee, Woong-Ki Kim, and Kee-Nam Choo(KAERI)
- P04E07 Air Oxidation of Zirconium-alloys**
Seonggi Jeong, Kwangheon Park, Kyungtae Kim, Thu Nandar Nyein, and Jinhyun Sung(KHU)
- P04E08 Diffusivity Measurement of Xenon Atom in Irradiated Doped UO_2**
Heemoon Kim, Sang-Ho Na, Chang-Je Park, Kweon Ho Kang, Man Soon Cho, Seong Je Baik, and Sang Ryul Baek(KAERI)
Kwangheon Park(KHU)
- P04E09 Application of Electron Beams for Surface Modification of Nickel-base Superalloys**
Injin Sah, Donghoon Kim, Jahyun Koo, and Changheui Jang(KAIST)

Ⅲ. 분과별 논제 및 발표자

제 4 분과 F

핵연료 및 원자력재료 III – Poster (Nuclear Fuel and Materials III)

좌 장 허도행(Do Haeng Hur), 김대환(Dae Whan Kim)

발표장소 주목홀

일 정 | 5. 26(목) 13:00-15:00

- P04F01 Comparison of Intergranular Attack Observed in Plant and Laboratory**
Do Haeng Hur, Myung Sik Choi, Jung Ho Han, and Deok Hyun Lee(KAERI)
- P04F02 The Effect of NiB on the Denting Corrosion at the Heated Crevice Environment**
Myong-Jin Kim, Joung Soo Kim, Dong Jin Kim, and Hong Pyo Kim(KAERI)
- P04F03 Disposal Cost of Pyro-Waste**
S. K. Kim, M. S. Lee and W. I. Ko(KAERI)
- P04F04 Parameter Estimation Using Bayesian Updating Method**
JaeYoung Yoon, HyoOn Nam, and IISoon Hwang(SNU)
TaeHyun Lee(SAMSUNG)
- P04F05 Effect of Recycled U_3O_8 Powders on Doped UO_2 Pellets Property**
Ik Hui Nam, Jae Ho Yang, Young Woo Rhee, Dong-Joo Kim, Jong Hun Kim, and Keon Sik Kim(KAERI)
- P04F06 Thermal Analysis of a High Frequency Induction Coil for a Casting Furnace**
Hye-Jin Lee, Woo-Jeong Kim, Yoon-Sang Lee, Jae-Ho Yang, and Jong-Man Park(KAERI)
- P04F07 Cyclic Softening Behavior with Slip System of FMS Steel**
Dae Whan Kim and Sung Soo Kim(KAERI)
- P04F08 Verification of Theoretical Equation for Optimum Design on Vol-Oxidizer Reactor**
Young-Hwan Kim, Geun-Il Park, Jung-Won Lee, Yong-Soon Lee, Do-Youn Lee, and Su-Sung Kim(KAERI)
- P04F09 Behavior of Creep in the Simulated Dual-Cooled Cladding Tubes**
Yang-II Jung, Byoung-Kwon Choi, and Jeong-Yong Park(KAERI)

제 4 분과 G

핵연료 및 원자력재료(Nuclear Fuel and Materials) - Poster - 구조재료 평가(Evaluation of Structural Materials)

좌 장 김우곤(Woo-Gon Kim), 김대환(Dae Whan Kim)

발표장소 주목홀

일 정 | 5. 26(목) 13:00-15:00

- P04G01 Equivalent Young's Modulus of Perforated Shell with Square Penetration Pattern**
Myung Jo Jhung and Yong Ho Ryu(KINS)
- P04G02 Tantalum-Addition Effect on Tensile and Creep Properties in 9Cr-0.5Mo-2W-V-Nb Steels**
Woo-Gon Kim, Sung-Ho Kim, Jong-Hyuk Back, Tae-Kyu Kim, and Chan-Bock Lee(KAERI)
- P04G03 Brazing of Sealing for Instrumentation Feedthrough of High Pressure Vessel**
H. Y. Jeong, S. H. Ahn, C. Y. Joung, J. M. Lee, and C. Y. Lee(KAERI)
- P04G04 Application of Corrosion Test for Austenitic SS 304 in PWR with Electrochemical Quartz Crystal Microbalance (EQCM)**
Jeong Seok Park, Sang Hun Shin, Jong Jin Kim, and Ji Hyun Kim(UNIST)
- P04G05 Nonlinear Ultrasonic Characteristics due to an Evolution of Micro-crack during a Fatigue Process**
Yong-Moo Cheong, Kyung-Jung Kim, and Hyun Kyu Jung(KAERI)
- P04G06 Experimental Study on Corrosion Behaviors of SS 316L in High Temperature Liquid Metals**
Sang Hun Shin, Jong Jin Kim, Jeong Seok Park, In Cheol Bang, and Ji Hyun Kim(UNIST)
- P04G07 AE Signal Characteristics of the Initial Stress Corrosion Crack in the STS 304 Pipe**
Jae-Seong Kim and Bo-Young Lee(KAU)
Sung-sik Kang(KINS)
- P04G08 Creep Properties of Alloy 617 at 900°C in Helium Environments with Various Oxygen Concentrations**
Jahyun Koo, Donghoon Kim, Injin Sah, and Changheui Jang(KAIST)
- P04G09 Fatigue Crack Growth Rate and Fracture Resistance of Heat Affected Zone of Stainless Steel Narrow Gap Welds**
HoJung Lee, Minu Kim, and Changheui Jang(KAIST)
Sun-Young Cho(KLES)
Jun-Seog Yang(KEPCO RI)

Ⅲ. 분과별 논제 및 발표자

제 4 분과H

핵연료 및 원자력재료(Nuclear Fuel and Materials) - Poster - 조사 시험(Irradiation Test)

좌 장 이병호(Byung-Ho LEE), 조문성(Cho Moon-Sung)

발표장소 주목홀

일 정 | 5. 26(목) 13:00-15:00

- P04H01 Utilization of HANARO Irradiation Facilities in 2010**
Kee Nam Choo, Man Soon Cho, Young Hwan Kang, and In Chel Lim(KAERI)
- P04H02 An Investigation on Irradiation-induced Growth in PLUS7 Fuel Assembly**
Young Ki Jang, Jong Sung Yoo, Kyeong Lak Jeon, Yong Hwan Kim, Jae Ik Kim, and Sun Tack Hwang(KEPCO NF)
Man Su Kim, Tae Hyoung Lee, Yong Bae Yoon, and Tae Wan Kim(KHNP)
- P04H03 The Development of LVDT for the Pressure and Elongation Measurement of an Irradiation Test Fuel Rod**
Chul-Yong Lee, Soo-Sung Kim, and Kee-Nam Choo(KAERI)
- P04H04 Simulation of TRISO Fuel Irradiation by Using Surrogate Heating Elements**
Moon-Sung Cho and Y. M. Kim(KAERI)
- P04H05 Study of Microstructural Defects in Stainless Steels with Positron Annihilation Spectroscopy**
Jung-ki Shin, Yongbok Lee, and Junhyun Kwon(KAERI)
- P04H06 Development of High Temperature Irradiation Technologies**
Man Soon Cho, Kyue Taek Shim, Kee Nam Choo, Chul Yong Lee, Bong Goo Kim, Young Hwan Kang, and In Cheol Lim(KAERI)
- P04H07 Specific Heat Capacity of Alloy 690 for Simulating Neutron Irradiation**
Daegy Park, Heemoon Kim, Woongsub Song, Seungje Baik, Youngsun Joo, Sangbok Ahn, Jinseok Park, Wonjae Lee, and Wooseok Ryu(KAERI)
- P04H08 Improvement of Uncertainty for a Remote-controlled Impact Tester in Hot Cell**
Yong-Sun CHOO, Gil-Soo KIM, Do-Sik Kim, Seung-Je BAIK, Byung-Ok YOO, Ki-Ha KIM, Sang-Youl BAEK, Eun-Pyo LEE, Sang-Bok Ahn, and Woo-Seok Ryu(KAERI)
- P04H09 Numerical Approach of Grain Shape Effect on the Diffusional Fission Gas Release**
Oh-Hyun Kwon, Hye-In Shin, Young-Ho Heo, Jae-Ik Kim, and Kyeong-Lak Jeon(KEPCO NF)

제 5 분과 A

원자력 열수력 및 안전(Thermal Hydraulics and Safety)

- 열수력실험(Thermal Hydraulic Experiment)

좌 장 권태순(Tae-Soon KWON), 이재영(Jae Young LEE)

발표장소 함백홀

일 정 | 5. 26(목)

- 09:00 Experimental Study of Subcooled Flow Boiling CHF Enhancement on Modified Zirconium Alloy Tube With Micro Structure**
Soon Ho Kang, Ho Seon Ahn, Hang Jin Jo, Seol Ha Kim, Gunyeop Park, Ji Min Kim, and Moo Hwan Kim(POSTECH)
- 09:20 A Hydraulic Test for SMART Reactor Flow Distribution: Run No. SCOP-E-01**
D. J. Euh, Y. J. Youn, I. C. Chu, Y. J. Ko, T. S. Kwon, and S. J. Lee(KAERI)
- 09:40 Separate Effects of Surface Roughness, Wettability and Nano-porosity on the Leidenfrost Point Temperature of Water**
Hyungdae Kim(KHU)
- 10:00 Evaluation of Mixed Convection Heat Transfer Correlations at Supercritical Pressures**
Yoon-Yeong Bae, Sung-Deok Hong, and Yong-Wan Kim(KAERI)
- 10:20 A SBLOCA Test of Safety Injection System for SMART with the VISTA-ITL and Its Simulation with the MARS-KS Code**
Hyun-Sik Park, Byoung-Yeon Min, Rae-Joon Park, Sang-Ki Moon, Hwang Bae, and Sung-Jae Yi(KAERI)
Doo-Hyuk Kang and Jae-Seung Suh(SET)
- 10:40 Coffee Break**
- 11:00 Review of the Characteristics of Steam Plume Jet in Water**
Yeon-Sik Kim, Ki-Yong Choi, and Chul-Hwa Song(KAERI)
- 11:20 Large-scale Flow Pulsation in Tight Square Arrayed Rod Bundles of Nuclear Reactor**
Taehwan Kim, Kyung Min Kim, and Hyung Hee Cho(YONSEI Univ.,)
Chang Hwan Shin and Wang-Kee In(KAERI)
- 11:40 Pressure Variation Analysis in the Down-scaled SMART Model**
Dong hwi Lee, Kyung Min Kim, Byoung In Lee, and Hyung Hee Cho(YONSEI Univ.,)
Jin Seok Park and Kyeong Hoon Jeong(KAERI)

Ⅲ. 분과별 논제 및 발표자

제 5 분과 B

원자력 열수력 및 안전(Thermal Hydraulics and Safety)

- 열수력해석(III) (Thermal Hydraulic Analysis III)

좌 장 김한곤(Han Gon KIM), 안승훈(Seung-Hoon AHN)

발표장소 태백홀

일 정 | 5. 26(목)

- 09:00 Study on Thermal-hydraulic Phenomena Identification of Passive Heat Removal Facilities**
J. Y. Park(KINS)
- 09:20 Assessment of Capability of MARS Code for Safety Evaluation of APR+ PAFS**
Seong Su Jeon and Byung Chul Lee(FNC Tech.)
Ju Yeop Park and Kwang Won Seul(KINS)
- 09:40 APR+ PAFS Cooling Performance Analysis Using RELAP5**
Kyung Jin Lee and Soon Joon Hong(FNC Tech.)
- 10:00 Assessment of Heat Removal Capability of Passive Auxiliary Feedwater System Using MARS Code**
Yun-Je Cho, Byong-Uhn Bae, Byong-Jo Yun, and Chul-Hwa Song(KAERI)
- 10:20 Performance Analysis of APR+ PAFS for CDF Evaluation**
Sang Hee Kang and Han Gon Kim(KHNP)
- 10:40 Coffee Break**
- 11:00 MARS-KS Calculations for ATLAS 6-inch Cold Leg Break Test (DSP-02)**
Dong-Gu Kang, Joo-Sung Kim, Seung-Hoon Ahn, and Kwang-Won Seul(KINS)
- 11:20 Effects of Fuel Burnup and Rod Performance on the PCT during LBLOCA**
Joosuk Lee, Byung-Gil Huh, Young Seok Bang, Haedong Jeong, Andong Shin, and Swengwoong Woo(KINS)
- 11:40 Analysis of LOCA M/E and Containment P/T Using KIMERA Methodology for APR1400**
Cheol Woo Kim, Yong Mok Kim, Ki Moon Park, and Jeung Hyo Song(KEPCO E&C)

제 5 분과 C

원자력 열수력 및 안전(Thermal Hydraulics and Safety)

- 중대사고/PSA (Severe Accident/Probabilistic Safety Assessment)

좌 장 홍성완(Seong-Wan HONG), 김길유(Kilyoo KIM)

발표장소 퇴계룸

일 정 | 5. 26(목)

- 09:00 Observations Emerged from ISTP-EPICUR on Iodine Behavior during a Severe Accident**
Han-Chul Kim, Do Sam Kim, Dong-Ju Jang, Jongseong Lee, Han-Byeol Kang, and Sung-Jin Jeon(KINS)
- 09:20 CFD Analyses of Hydrogen Flame Acceleration in the ENACCEF and IRWST Facilities**
Hyung Seok Kang, Kwang-Soon Ha, and Sang-Baik Kim(KAERI)
- 09:40 Effects of Nanofluid for In-Vessel Retention External Reactor Vessel Cooling on Critical Heat Flux Using Pool Boiling Experiments**
Sung Dae Park, Sarah Kang, Seung Won Lee, and In Cheol Bang(UNIST)
- 10:00 Introduction of VESTA Facility and Melting Test Results**
Hwan Yeol Kim, Jong Hwan Kim, Beong Tae Min, Seong Wan Hong, Rae Joon Park, and Jin Ho Song(KAERI)
- 10:20 The Corium Spreading in the Reactor Cavity during Severe Accident in the SMART**
Youngho Jin(KAERI)
- 10:40 Coffee Break**
- 11:00 A Study on the On-Line Maintenance Risk Assessment Methods**
Jae-Ho Kim and Moosung Jae(HYU)
Sang-Kyu Ahn and Chang-Ju Lee(KINS)
- 11:20 A Reliability Assessment Method for the VHTR Safety Systems**
Hyung-sok Lee and Moosung Jae(HYU)
Yong-wan Kim(KAERI)
- 11:40 Calculation of Core Damage Frequency for the Change of the Common Cause Failure Parameters According to the Testing Strategies**
Dae Il Kang, Kilyoo Kim, Young Ho Jin, and Tae-Woon Kim(KAERI)
- 12:00 Modeling of Cabinet Fire in Switchgear Room Using Fire Dynamic Simulator**
Dae Il Kang, Jong Seuk Park, and Ho Gon Lim(KAERI)

Ⅲ. 분과별 논제 및 발표자

제 5 분과 D

원자력 열수력 및 안전(Thermal Hydraulics and Safety) - Poster - 열수력실험(Ⅰ) (Thermal Hydraulic Experiment Ⅰ)

좌 장 김윤호(Yun Ho KIM), 문상기(Sang-Ki MOON)

발표장소 주목홀

일 정 | 5. 26(목) 13:00-15:00

- P05D01 Local Velocity Measurement in DYNAS Having 2D Slab Test Section Using Impedance Measurement Technique**
S. Kim, D. J. Euh, B. D. Kim, W. M. Park, B. J. Yun, C. -H. Song, and K. D. Kim(KAERI)
J. H. Bae and J. Y. Lee(HGU)
- P05D02 Bubble Size Effect on the Interfacial Area Transport in Gas Liquid Two-phase Flow**
V. T. Nguyen, C-. H. Song, and D. J.Euh(KAERI)
- P05D03 Droplet Measurement Across a Grid Spacer in a 2x2 Rods during Reflood**
Byoung Jae Kim, Hyoung Kyu Cho, Jong Kuk Park, and Sang Ki Moon(KAERI)
- P05D04 Ultrasonic Measurement of Water Layer Thickness by Flow Pattern Profile in a Horizontal Air Water Loop**
Kil-Mo Koo, Chul-Hwa Song, and Young-Rho Cho(KAERI)
Seung-Tae Lee(UST)
- P05D05 Flow Boiling CHF Experiments Using Nanofluid under Different Heating Rate**
Tae Il Kim, Young Taek Jee, and Soon Heung Chang(KAIST)
- P05D06 Experimental Study on the CHF Enhancement of the Nanofluids Containing Exfoliated Graphite Nanoplatelets(xGnP)**
Eun ju Park, Hyung wook Park, Sung dae Park, and In cheol Bang(UNIST)
- P05D07 Preliminary Experiment on Upward Supercritical Carbon Dioxide Flow in a Vertical Tube with Metallic Surrounding**
Hyung M. Son, Jae S. Yoo, and Kune Y. Suh(SNU)
- P05D08 Experimental Study of the Characteristics of Pool Boiling CHF Enhancement Using Water-based Magnetic Fluid**
Jong Hyuk Lee and Yong Hoon Jeong(KAIST)
- P05D09 Effects of Magnetic Fields on the Flow Boiling CHF of Magnetic Nanofluids**
Taeseung Lee and Yong Hoon Jeong(KAIST)
- P05D10 Investigation of Critical Heat Flux Enhancement in Flow Boiling Using Nanofluids**
Seung Won Lee, Sung Dae Park, Sarah Kang, Seong Man Kim, and In Cheol Bang(UNIST)
Dong Won Lee(KAERI)

제 5 분과 E

원자력 열수력 및 안전(Thermal Hydraulics and Safety) - Poster - 열수력실험(II) (Thermal Hydraulic Experiment II)

좌 장 이성재(Sung-Jae Yi), 서남덕(Nam Duk SUH)

발표장소 주목홀

일 정 | 5. 26(목) 13:00-15:00

- P05E01 Analysis of the Natural Circulation Behavior in Regional Energy rX-10MW_{th}**
Byeong-Il Jang(KEPCO NF)
Sun-Do Choi(KINAC)
Moo Hwan Kim(POSTECH)
Gyoodong Jeun(HYU)
- P05E02 Design and Construction of 3-Ch Cross Flow Test Facility**
C. K. Park, S. T. Lee, T. S. Kwon, and C. H. Song(KAERI)
- P05E03 Experimental Investigation of the Trapping Efficiency of a Debris Interceptor for ECCS Recirculation Strainers of Korean NPPs**
Byung Il KWON, Jong Uk KIM, and Jae Seon CHO (FNC Tech.)
Tae Hyub HONG and Sang Won LEE(KHNP)
- P05E04 An Experimental Study on a Small Break Loss of Coolant Accident of the Pressurizer Safety Valve Line Break with the VISTA-ITL**
Byoung-Yeon Min, Hyun-Sik Park, Yong-Chul Shin, Nam-Hyun Choi, and Sung-Jae Yi(KAERI)
- P05E05 Numerical Studies of Thermal Hydraulic Characteristics through Rectangular Channels**
Daeseong Jo, Jonghark Park, and Heetaek Chae(KAERI)
- P05E06 Cavitation Effect of Shock Pressure about Nuclear Power Plant Component Cleaning or Crud Removal**
Seong Man Kim, Seung Won Lee, Sung Dae Park, Sarah Kang, and In Cheol Bang(UNIST)
- P05E07 Design Development of SMART ECC Water Asymmetric Two-phase Choking Test Facility**
Youngil Cho, Seok Cho, Yungjoo Ko, Yongcheol Shin, and Taesoon Kwon(KAERI)
- P05E08 Experimental Results of the SMART ECC Injection Performance with Reduced Scale of Test facility**
Youngil Cho, Seok Cho, Yungjoo Ko, Yongcheol Shin, and Tae-Soon Kwon(KAERI)
- P05E09 Development of a Test Facility to Simulate the Reactor Flow Distribution of APR+**
D. J. Euh, S. Cho, Y. J. Youn, J. T. Kim, H. S. Kang, and T. S. Kwon(KAERI)
- P05E10 Control Engineering of Controlled Power Supply for Transient Condition Experiment**
B. Halimi, Sang G. Park, and Kune Y. Suh(SNU)

Ⅲ. 분과별 논제 및 발표자

제 5 분과 F

원자력 열수력 및 안전(Thermal Hydraulics and Safety) - Poster - 열수력해석(Ⅰ) (Thermal Hydraulic Analysis Ⅰ)

좌 장 윤한영(HanYoung YOON), 이철신(Cheol Shin LEE)

발표장소 주목홀

일 정 | 5. 26(목) 13:00-15:00

- P05F01 Preliminary Analysis for Determination on the Flow Path of SMART Core Shielding Structure**
Y. M. JEON, Y. G. KIM, Y. M. BAE, Y. I. KIM, C. T. PARK, and S. CHOI(KAERI)
- P05F02 Numerical Simulation on the Venturi in SMART Reactor Flow Distribution Test Facility**
J. Yoon, H. Bae, Y. I. Kim, Y. J. Chung, and W. J. Lee(KAERI)
- P05F03 A Multi-physics Simulation of the Reactor Core Using CUPID/MASTER**
Jae Ryong Lee, Hyoung Kyu Cho, Han Young Yoon, and Jin Young Cho(KAERI)
Jae Jun Jeong(PNU)
- P05F04 Evaluation of the EAGLE Code with One-group IATE in Vertical-upward Gas-liquid Flow Condition**
V. T. Nguyen, C-. H. song, and B. U. Bae(KAERI)
- P05F05 A CFD Simulation of a 1/5 Linear-scaled Steam Generator Simulator**
Hwang Bae, Dongjin Euh, Incheol chu, Youngin Kim, Jung Yoon, Young-jong Chung, and Wonjae Lee(KAERI)
- P05F06 The Unified Fluid Solver for Solid-Liquid-Gas Interaction Phenomenon**
Lee, Seung-Jun(KAERI)
Lee, In(KAIST)
- P05F07 Thermal Stabilization of Cryogenic System in Superconducting Cyclotron**
Seung Jae Shin, Kyung Min Kim, and Hyung Hee Cho(YONSEI Univ.,)
Bong Hwan Hong, Joonsun Kang, and Dong Hyun Ahn(KIRAMS)
- P05F08 A New Correlation for Counter-current Flow Limited CHF in Narrow Rectangular Channels**
Ju Hyung Lee and Soon Heung Chang(KAIST)

제 5 분과 G

원자력 열수력 및 안전(Thermal Hydraulics and Safety) - Poster - 열수력해석(II) (Thermal Hydraulic Analysis II)

좌 장 홍순준(Soon Joon HONG), 박찬억(Chan-Eok PARK)

발표장소 주목홀

일 정 | 5. 26(목) 13:00-15:00

- P05G01 Evaluation on the Conservative Critical Flow Model in SPACE Code Using Marviken Test**
Suk-Ho Lee and Han-Gon Kim(KHNP)
- P05G02 Implicit Safety Injection Tank Model of the SPACE Code and Its Validation**
Dong Eun Kim, Il Soon Park, Chan Eok Park, and Jong Joo Sohn(KEPCO E&C)
- P05G03 Development of a Two-dimensional Heat Structure Model in SPACE Code**
Jungwoo Kim, Seung-Wook Lee, and Kyung Doo Kim(KAERI)
- P05G04 Fuel Model Validation in the TASS/SMR-S Code by Comparing with Experimental Results**
Sang-Jun Ahn, Soo Hyung Yang, Young-Jong Chung, and Won-Jae Lee(KAERI)
- P05G05 Drag Models for Annular Flow in SPACE Code**
Byoung Jae Kim and Kyung Doo Kim(KAERI)
- P05G06 Evaluation of RCP Model for TASS/SMR-S Code**
Sung Won Lim, Young Jong Chung, and Won Jae Lee(KAERI)
- P05G07 Experimental Validation of TASS/SMR-S Critical Flow Model for the Integral Reactor SMART**
Si Won Seo, In Sik Ra, and Kun Yeup Kim(ACT Co., Ltd)
Youngjong Chung(KAERI)
- P05G08 Improvement of Interfacial Heat Transfer Model and Correlations in SPACE Code**
Sung Won Bae and Kyung Du Kim(KAERI)
- P05G09 Validation of the TASS/SMR-S Code for the PRHRS Condensation Heat Transfer Model**
In Sub Jun, Soo Hyoung Yang, and Young Jong Chung(KAERI)
- P05G10 Development of a Novel Infrared-based Visualization Technique to Detect Liquid-gas Phase Dynamics on Boiling Surfaces**
Hyungdae Kim(KHU)

Ⅲ. 분과별 논제 및 발표자

제 5 분과 H

원자력 열수력 및 안전(Thermal Hydraulics and Safety) - Poster - 열수력해석(III) (Thermal Hydraulic Analysis III)

좌 장 최한림(Han Rim CHOI), 정영중(Young-Jong CHUNG)

발표장소 주목홀

일 정 | 5. 26(목) 13:00-15:00

- P05H01 The Effect of a CANDU Fuel Bundle Geometry on Dryout Power**
Jun Ho Bae and Joo-Hwan Park(KAERI)
- P05H02 Evaluation of the PRHRS Performance Degradation due to Non-condensable Gas for the Small and Medium Reactor Using MARS-KS Code**
Sook Kwan Kim and Suk Ku Sim(en2t)
Ju Yeop Park, Kwang Won Seol, and Yong Ho Ryu(KINS)
- P05H03 Radionuclide Release after Channel Flow Blockage Accident in CANDU-6 Plant**
Hoon Choi and Hwang-Yong Jun(KEPCO RI)
- P05H04 Feasibility Study to Advanced Design Features of the APR1000 through CEA Ejection Accident Analysis**
Yo-Han Kim, Chang Keun Yang, Hwan Soo Lee, and Sang Jun Ha(KEPCO RI)
- P05H05 A Case Study of PHWR ROP Thermal Hydraulic Calculation Methodology**
Eui-Seung Ryu, Sung-Tae Yang, and Kyung-Ho Roh(KHNP)
- P05H06 Analysis the PORV Accident for the Kori #2 Using SPACE Code**
Bum-Soo Youn, Hwang-Yong Jun, Dong-Hyuk Lee, Se-Yun Kim, and Sang-Jun Ha(KEPCO RI)
- P05H07 Analysis of ATLAS 6-inch Cold Leg Break Simulation with MARS-KS Code**
Seyun Kim, Hwang-Yong Jun, and Sang-Jun Ha(KEPCO RI)
- P05H08 Simulation of the VISTA SG Heat Transfer Experiment Using MIDAS/SMR**
Jong-Hwa Park, Dong-Ha Kim, Young-Jong Chung, and Sunhee-Park(KAERI)
Seong-Won Cho(KORTIC)
- P05H09 LOFT L9-3 ATWS Experiment Simulation Using the SPACE Code**
Chang-Keun Yang, Dong-Hyuk Lee, Yo-Han Kim, and Sang-Jun Ha(KEPCO RI)
Sung-Yull Hong(YU)

제 5 분과 I

원자력 열수력 및 안전(Thermal Hydraulics and Safety) - Poster - 열수력해석(IV) (Thermal Hydraulic Analysis IV)

좌 장 김철우(Cheol Woo KIM), 최기용(Ki Yong CHOI)

발표장소 주목홀

일 정 | 5. 26(목) 13:00-15:00

- P05I01 Numerical Simulation for a Core Simulator of ACOP**
Jun Ho Bae, Dong Jin Euh, and Tae-Soon Kwon(KAERI)
- P05I02 CFD Analysis for the Variation of Flow Pattern between the Real Model with Holes and Simplified Model with Porous in Steam Generator**
Y. G. KIM, Y. M. JEON, Y. M. BAE, Y. I. KIM, C. T. PARK, and S. CHOI(KAERI)
- P05I03 Verification of FAST Code Using Method of Manufactured Solution**
Hyuk Kwon, K. W. Seo, S. J. Kim, J. H. Cha, T. W. Kim, and D. H. Hwang(KAERI)
- P05I04 Pressurizer Heater and Safety Valve Test for SPACE Code**
Dong-Hyuk Lee, Bum-Soo Youn, Hwang-Yong Jun, Se-Yun Kim, and Sang-Jun Ha(KEPCO RI)
- P05I05 Analysis on a Fuel Assembly Simulator in the Reactor Flow Distribution Test for SMART**
Y. I. Kim, Y. M. Jeon, J. Yoon, H. Bae, Y. J. Chung, and W. J. Lee(KAERI)
- P05I06 A Response Surface Method for the VHTR Optimization Design**
Chan Suh Lee, Hyung Suk Lee, and Moo Sung Jae(HYU)
- P05I07 Relaxation of Pressure and Temperature during HELBA for Subcompartment**
Dong-Soo Song, Jeong-Kwan Suh, Duk-Joo Yoon, and In-Hwan Kim(KEPCO RI)

Ⅲ. 분과별 논제 및 발표자

제 5 분과 J

원자력 열수력 및 안전(Thermal Hydraulics and Safety) - Poster - 중대사고 (Severe Accident)

좌 장 문영태(YoungTae MOON), 박래준(Rae-Joon PARK)

발표장소 주목홀

일 정 | 5. 26(목) 13:00-15:00

- P05J01 Simulation of the QUEOS Experiment Using Rigid Dynamic-moving Particle Semi-implicit (RD-MPS) Method**
Shane Park(KEPCO NF)
Hyun Sun Park(SINEWSTEK)
Gyoodong Jeun(HYU)
- P05J02 CFD Analysis of Hydraulic Characteristics for a PWR Fuel Assembly**
Dong-Hyeog Yoon, Han-Chul Kim, and Kwang-Won Seul(KINS)
- P05J03 Heat Transfer Correlation Dependency on Thermal Load Response of a Melting Pool in a Lower Plenum during Severe Accident**
Jae Ryong Lee, Rae Joon Park, and Seong Wan Hong(KAERI)
- P05J04 Analysis of a Natural Circulation in the Reactor Coolant System Following a High Pressure Severe Accident at APR1400**
Han-Chul Kim, Yong-Jin Cho, and Jae-Hong Park(KINS)
Song-Won Cho(KORTIC)
- P05J05 Triggerability and Explosion Potential at Fuel Coolant Interactions**
Ik Kyu Park, Jong Hwan Kim, and Seong Wan Hong(KAERI)
- P05J06 Verification of Severe Accident Management Strategy Based on CANDU Reactor**
Young Choi, D. H. Kim, S. D. Kim, S. Y. Park, and Y. H. Jin(KAERI)
- P05J07 PCTran Analysis of Fukushima Event**
Li-Chi Cliff Po(MST)
Juyoul Kim(FNC Tech.)
- P05J08 Analysis of Air-water Two Phase Flow for K-HERMES-HALF Experiment Using RELAP5/MOD3**
Rae-Joon Park, Kwang-Soon Ha, Sang-Baik Kim, and Seong-Wan Hong(KAERI)
Sun Heo(KHNP)
- P05J09 Geometry and Material Scaling on Two Phase Natural Circulation Flow for K-HERMES-HALF Experiment**
Rae-Joon Park, Kwang-Soon Ha, Sang-Baik Kim, and Seong-Wan Hong(KAERI)
Sun Heo(KHNP)
- P05J10 MCCI Simulation for the APR-1400 TLOFW Sequence**
Jong-Hwa Park, Hwan Yeol Kim, Seong Wan Hong, and Kwang Soon Ha(KAERI)

-
- P05J11 Severe Accident Analysis of SBLOCA Sequences for SMART Using MELCOR Code**
Jaecheol Kim and Gunhyo Jung(FNC Tech.)
Hanchul Kim(KINS)
- P05J12 Development of Assessment Methodology of Chemical Behavior of Volatile Iodide under Severe Accident Conditions Using EPICUR Experiments**
Jae Yong Oh and Jong-Il Yun(KAIST)
Do Sam Kim and Han-Chul Kim(KINS)
- P05J13 Comparison of Severe Accident Scenarios for an Advanced PWR Using MELCOR Codes**
Tae-Woon Kim, Jin-Ho Song, and Sung-Won Cho(KAERI)

Ⅲ. 분과별 논제 및 발표자

제 5 분과 K

원자력 열수력 및 안전(Thermal Hydraulics and Safety) - Poster
- PSA/안전현안(Probabilistic Safety Assessment/Safety Issues)

좌 장 양준언(Joon-Eon YANG), 이창주(Chang-Ju Lee)

발표장소 주목홀

일 정 | 5. 26(목) 13:00-15:00

- P05K01 Perspective on US NRC Policy Issues Concerning Use of Risk Insights for Non-LWR**
Jun Su Ha, Ingoo Kim, Changwook Huh, and Kyun Tae Kim(KINS)
- P05K02 Development of Integrated Inspection Support System on In-service Test of NPPs**
Sang-Kyu Lee, Chang-Seok Ko, Nam-Seok Kim, and O-Hyun Keum(KINS)
Deok-Yong Song and Byung-Sub Han(ENESYS)
- P05K03 Effect of High Power Envelop for CANDU Fuel Safety Analysis**
Jong Yeob Jung and Joo Hwan Park(KAERI)
- P05K04 The Safety Implication of Hydrogen Production and Explosion for KFDP**
Jeongtae Cho and Gyunyoung Heo(KHU)
Young-seok Lee and Hyuck Jong Kim(NFRI)
- P05K05 Estimation of Impact Pressure due to Rupture in Beam-tube for Research Reactor**
Kyung Jun Kang and Namgyun Jeong(KAERI)
- P05K06 A Study on the Acceptance Criteria for Δ Trip Frequency**
Kilyoo Kim(KAERI)
Hyunwoo Lee and Moosung Jae(HYU)
- P05K07 Options of Regulatory Framework for On-line Maintenance**
Sang-Kyu AHN, Chang-Ju Lee, Nam-Chul Cho, and Gun-Hyun Chang(KINS)

제 5 분과 L

원자력 열수력 및 안전(Thermal Hydraulics and Safety)

- 열수력해석(I) (Thermal Hydraulic Analysis I)

좌 장 최철진(Chul Jin CHOI), 하상준(Sang Joon HA)

발표장소 함백홀

일 정 | 5. 27(금)

09:00 Reviews on the Stability of Numerical Solvers for Multi-fluid Models

Sang Yong Lee, Chan Eok Park, and Eun Kee Kim(KEPCO E&C)

09:20 A Stabilizing Numerical Scheme of the CUPID for a Fast Transient Two Phase Flow

Han Young Yoon, Ik Kyu Park, and Jae Ryong Lee(KAERI)

Jae Jun Jeung(PNU)

09:40 Development of Numerical Model for Water Cooling Boiling Heat Transfer on a Moving Hot Steel Plate

Il Seouk Park(KNU)

10:00 Discussion on the Energy Conservation across a Sharp Gradient Junction in SPACE-CAP Code

Soon Joon HONG, Yeon Joon CHOO, Su Hyun HWANG, Min Gi KIM, and Byung Chul LEE(FNC Tech.)

10:20 Supercritical Water Flow Model of the SPACE Code and Its Verification

Chan Eok Park, Sang Yong Lee, Jong Joo Sohn, and Eun Kee Kim(KEPCO E&C)

10:40 Coffee Break

11:00 CFD Works on Occurrence of Cavitation at the Downstream of Orifice

Byung Soo Shin, Sang Kyu Lee, Nam Seok Kim, and Oh Hyun Keum(KINS)

11:20 CFD Analysis of Random Turbulent Flow Load in Steam Generator of APR1400 under Normal Operation Condition

Sang-Gyu Lim, Sung-Chang You, and Han-Gon Kim(KHNP)

11:40 CCFL Model of the SPACE Code and Its Validation

Myung Taek oh, Chan Eok Park, Jong Joo Sohn, and Eun Kee Kim(KEPCO E&C)

Ⅲ. 분과별 논제 및 발표자

제 5 분과 M

원자력 열수력 및 안전(Thermal Hydraulics and Safety)

- 열수력해석(II) (Thermal Hydraulic Analysis II)

좌 장 김경두(Kyung Doo KIM), 반창환(Chang-Hwan BAN)

발표장소 태백홀

일 정 | 5. 27(금)

- 09:00 A Validation of CUPID Code for a Subcooled Boiling Test**
Ik Kyu Park, Jungwoo Kim, Hyung Kyu Cho, and Han Young Yoon(KAERI)
- 09:20 Steady-State Calculation of the ATLAS Test Facility Using the SPACE Code**
Hyoung Tae Kim, Ki Yong Choi, and Kyung Doo Kim(KAERI)
- 09:40 System Model Initialization for Nan-LOCA Analysis Using SPACE Code**
J. C. PARK, E. J. Lee, C. S. Lee, and E. K. Kim(KEPCO E&C)
- 10:00 Assessment of a Subchannel Code MATRA for OECD/NRC PSBT Benchmark Exercises**
Dae-Hyun Hwang, Seong-Jin Kim, and Kyong-Won Seo(KAERI)
- 10:20 MARS Code Simulation of A Cold Leg Intermediate Break LOCA at ROSA-2/LSTF**
Xin Guo Yu and KiYong Choi(KAERI)
- 10:40 Coffee Break**
- 11:00 Numerical Investigation on Transient Behavior of Steam-gas Pressurizer in Integral PWR**
Yeon-Gun Lee, Jong-Won Kim, and Goon-Cherl Park(SNU)
- 11:20 Numerical Analysis on Temperature Distribution in the Reactor Internals of SMART**
Kyung Min Kim, Byoung In Lee, Dong hwi Lee, and Hyung Hee Cho(YONSEI Univ.,)
Jin Seok Park and Young-Jong Chung(KAERI)
- 11:40 Introduction of Integral Test Facility, OSU-MASLWR and Steady State Calculation**
Young-Jong Chung, Sung Won Lim, and Won-Jae Lee(KAERI)

제 5 분과 N

원자력 열수력 및 안전(Thermal Hydraulics and Safety)

- 안전현안(Safety Issues)

좌 장 김한철(Han-Chul KIM), 허선(Sun HEO)

발표장소 퇴계룸

일 정 | 5. 27(금)

- 09:00 On PWR Fuel Failure Thresholds and Core Coolability Limits**
Seunghoon Ahn, Joosuk Lee, and Sungsik Kang(KINS)
- 09:20 Assessment of Thermal-hydraulic Behavior Following the Spray Event at Shinkori Unit 1 Using MARS Code**
Young Seok Bang, Byung Gil Huh, Seung Hoon Ahn, and Sweng-Woong Woo(KINS)
- 09:40 Simulation of Total Loss of Electric Power Accident in the PWR**
Seung Wook Lee, Kyung Doo Kim, and Chang Sup Lee(KAERI)
- 10:00 Development of Methodology for Evaluation of Chemical Effects on Sump Screen Performance Testing**
Young Wook CHUNG, Jae Seon CHO, Byung Il KWON, and Hee Kwon KU(FNC Tech.)
Yu Jung CHOI and Hyeong Taek KIM(KHNP)
- 10:20 Best Estimate Prediction of NFR with Uncertainty Following a LBLOCA of CANDU Plants**
Santosh Kumar Pradhan(AERB)
Young Seok Bang(KINS)
- 10:40 Coffee Break**
- 11:00 Addressing Uncertainty in Fire Modeling of MCC Fire in a Switchgear Room**
JongSeuk PARK and ChangJu LEE(KINS)
DaeIl KANG(KAERI)
- 11:20 Decay Heat and Dryout Behavior of Spent Fuel Storage Pool with ORIGEN-ARP and MARS Codes for the Station Blackout Accident**
Gil Soo Lee, Young Seok Bang, Gong-Hee Lee, Ae-Ju Cheong, and Sweng-Woong Woo(KINS)
- 11:40 Safety Analysis for Korean Fusion DEMO Plant**
Myoung-suk Kang and Gyunyoung Heo(KHU)
Young-seok Lee and Hyuck Jong Kim(NFRI)

Ⅲ. 분과별 논제 및 발표자

제 6 분과 A

방사선 이용 및 방호 (Radiation Utilization and Protection)

좌 장 최선주(Sun Ju Choi), 이기홍(Kye Hong Lee)

발표장소 자작름1

일 정 | 5. 26(목)

- 09:00 High-quality Crystalline Rubrene Thin Film on Electron-irradiated PS**
Hyeok Moo Lee, Yong Nam Kim, Jae Joon Kim, and Sung Oh Cho(KAIST)
- 09:20 Gamma Ray Tomographic Scan Method for Large Scale Industrial Plants**
Jinho Moon, Sung-Hee Jung, and Jongbum Kim(KAERI)
Jang-Geun park(HYU)
- 09:40 A Very High Uranium Density Fission Mo Target Suitable for LEU Using Atomization Technology**
C. K. Kim, K. H. Kim, Y. S. Lee, H. J. Ryu, Y. M. Woo, S. J. Jang, J. M. Park, and S. J. Choi(KAERI)
- 10:00 Determination of Inorganic Elements in White Rice by Neutron Activation Analysis**
J. H. Moon, S. H. Kim, J. M. Lim, Y. N. Lee, and Y. S. Chung(KAERI)
- 10:20 Intercomparison of Neutron Beam Guides for Cold Neutron Activation Station at HANARO Using McStas/VITESS/RESTRAX Codes**
Hoang Sy Minh Tuan and Gwang Min Sun(KAERI)
- 10:40 Coffee Break**
- 11:00 Imaging Performance Characterization of the Pixelated Scintillation Screens for Neutron Imaging**
Kim Jongyul and Cho Gyuseong(KAIST)
Lee Seung Wook, Kim Taejoo, and Kim Jeeyoung(KAERI)
- 11:20 Combined Effects of Radiation and Mercury on PLHC-1 Cells**
Jin Kyu Kim, Minkyung Cha, and Tae Ho Ryu(KAERI)
Min Han(Hankook Samgong Co., Ltd)
Mohammad Nili(DRRI)
- 11:40 Root Uptake and Downward Migration of ⁹⁹Tc Deposited during the Growth of Soybean Plants**
Yong Ho Choi, Kwang Muk Lim, In Jun, and Dong Kwon Keum(KAERI)

제 6 분과 B

방사선 이용 및 방호(Radiation Utilization and Protection) - Poster

- 방사선 방호/차폐/안전/이용 연구(Radiation Protection/Shielding/Safety/Utilization)

좌 장 이종일(Jong-Il Lee), 김병수(Byeong Soo Kim)

발표장소 주목홀

일 정 | 5. 26(목) 13:00-15:00

- P06B01 Radiosensitivity of *Saccharomyces Cerevisiae* W303-1A and BY4741 Strains**
Jiyoung Park and Jin Kyu Kim(KAERI)
Mohammad Nili(DRRI)
- P06B02 Basic Design Status of Hot Water Layer System for Open Pool Research Reactor**
Jungwoon Choi, Namgyun Jeong, Dae Young Chi, and Joohyun Yoon(KAERI)
Yeon Ho Jeong(System D&D Co., Ltd)
- P06B03 Security Measures in Transport of Radiation Source in Jordan**
Alsman Mohammad(KAIST)
Kwang Sik Choi(KINS)
- P06B04 Off-site Dose Calculation of Hypothetical Severe Accident (SBLOCA) for SMART Using MACCS2 Code**
Gunhyo Jung and Jaechul Kim(FNC Tech.)
Hanchul Kim(KINS)
- P06B05 Regulation of Transportation of Radioactive Material in Indonesia**
Muttaqin Margo Nirwono(KAIST)
Kwang Sik Choi(KINS)
- P06B06 The Radiation Streaming Calculation for Air Gap of the Shielding Door**
Y. S. Min, G. P. Jeon, K. J. Mun, J. M. Nam, J. S. Cho, J. H. Cho, and Jun Yeon Kim(KAERI)
- P06B07 Shielding Analysis of High Density Polyethylene and Borax for Lead Slowing Down Time Spectrometer System**
K. Y. Noh, C. J. Park, Y. D. Lee, J. Y. Hyeon, and G. I. Park(KAERI)
- P06B08 Effect of Electron Irradiation on Fullerene Derivatives**
Sung Oh Cho and Seung Hwa Yoo(KAIST)
- P06B09 Fabrication of Octahedral Gold Nanoparticle Embedded Polymer Pattern Based on Electron Irradiation and Thermal Treatment**
Yong Nam Kim, Hyeok Moo Lee, and Sung Oh Cho(KAIST)

Ⅲ. 분과별 논제 및 발표자

제 6 분과 C

방사선 이용 및 방호(Radiation Utilization and Protection) - Poster

- 방사선 및 RI 활용 생명의학연구(Application of Radiation and RI for Medical/Life Science)

좌 장 강창모(Chang Mo Kang), 이준식(Jun Sig Lee)

발표장소 주목홀

일 정 | 5. 26(목) 13:00-15:00

- P06C01 Construction of Radiation - Induced Metastasis Model in Vivo**
Jong Kuk Park, Su Jin Jang, Sung Wook Kang, Jae-sung Kim, Sang-Gu Hwang, Joo Hyun Kang, and Hong-Duck Um(KIRAMS)
- P06C02 Therapeutic Effects of Human Umbilical Cord Blood-derived Mesenchymal Stem Cells on the Radiation-induced GI Syndrome**
Sehwan Shim, Won-Suk Jang, Sun-Joo Lee, Eun-Young Park, Younjoo Kim, Sungho Jin, Sunhoo Park, and Seung-Sook Lee(KIRAMS)
- P06C03 Measurements of Relative Depth Doses in Induced by High-Energy Proton Beam Using Multi-Dimensional Fiber-Optic Radiation Sensor**
K. W. Jang, W. J. Yoo, J. K. Seo, J. Moon, K. T. Han, J-Y. Park, and B. Lee(KU)
D. Shin and S-Y. Park(NCC)
- P06C04 Study on Antibiotic Compounds from Pseudomonas Aeruginosa N04 Strain**
Ji-young Nam and Jin Kyu Kim(KAERI)
- P06C05 Induction of Premature Senescence by Single and Fractionated Irradiation in Human Cancer Cell Line and Xenografted Mice Model**
Hee Jung Yoo, Bong Cho Kim, Hyung Chul Lee, Young-Hoon Ji, Seungwoo Park, and Jae-Seon Lee(KIRAMS)
- P06C06 Identification and Characterization of Secretory Proteins during Ionizing Radiation-induced Premature Senescence**
Na-Kyung Han, Mi-Na Hong, Seung Hee Jung, Kyoung Ah Kang, and Jae-Seon Lee(KIRAMS)
Seong-Gil Chi(Korea Univ.,)
- P06C07 The Preliminary Study of an In-vivo Proton Therapy and a Cancer Diagnosis Using Optical Coherence Tomography**
Myung-Hwan Jung, Se-Jin Ra, and Kye-Ryung Kim(KAERI)
Hyun-Woo Song, Jung-Won park, and Seung-Kyung Yang(ETRI)
- P06C08 Fabrication Method of the Mo-99 Target with Advanced Planar Flow Casting**
M. S. Sim and J. H. Lee(CNU)
C. K. Kim and Y. M. Woo(KAERI)
- P06C09 Thermal Properties of High Current Solid Target for High Power**
In-Kong YU, Hyun park, Ji-Sub Lee, Kwon-Soo Chun, and Jaehong Kim(KIRAMS)
Sang-Rok Kim(Hanil Nuclear Co., Ltd)
- P06C10 ¹¹C Gas Target Yield Increase of KOTRON-13 Cyclotron**
W. K. LEE, S. K. CHAE, B. O. CHO, J. H. KIM, K. H. YANG, and S. Y. LEE(Samyoung Unitech Co., Ltd)

제 6 분과 D

방사선 이용 및 방호(Radiation Utilization and Protection) - Poster

- 방사선 기기/시설기반 연구(Instrumentation and Facility-based Research for Radiation Application)

좌 장 김찬형(Chan-Hyeong Kim), 이원호(Won-Ho Lee)

발표장소 주목홀

일 정 | 5. 26(목) 13:00-15:00

- P06D01 New Design Concept of Neutron Screen for 8" NTD Irradiation in HANARO**
S. T.Hong, H. S.Jung, and S. J.Park(KAERI)
- P06D02 Fabrication and Scintillation Characteristics of CsI:TI Scintillator for X-ray Imaging System**
Youngju Kim and Kyongwoo Kim(Nano Focus Ray)
Hyunduk Kim, Gyuseong Cho, and Jongyul Kim(KAIST)
- P06D03 Acquisition of Two-dimensional Pulse Height Distribution by Using CAMAC Modules**
N. S. Jung, J. H. Kim, and H. D. Choi(SNU)
- P06D04 Electron Beam Treatment of Toxic Chemicals**
Inha Jung, MyunJoo Lee, Ohmi Lee, and Taehoon Kim(KAERI)
- P06D05 Radiation Fusion Technology for Sewage Sterilization**
M. J.Lee, T. H. Kim, S. H. Ryu, I. H. Jung, O. M. Lee, and T. H. Kim(KAERI)
- P06D06 A New Algorithm for Nuclide Identification of HYPERGAM**
B. G. Park, N. S. Jung, J. H. Kim, and H. D. Choi(SNU)
C.S. Park(KINS)
- P06D07 Fabrication and Performance Test of the Cosmic Charged Particle Detector with Plastic Scintillator and WLS**
Yun Ho Kim, Jeong Su Kang, Doh Yun Jang, Byoung Hwi Kang, Min sang Ryu, and Yong Kyun Kim(HYU)
- P06D08 Plasma-Electron Coirradiation Induced Fabrication of Hexagonal Non-Close-Packed Colloidal Crystal Monolayer**
Jae Joon Kim and Sung Oh Cho(KAIST)
Yue Li(AIST)
Eun Je Lee(KAERI)
- P06D09 Characteristics of Fabricated SiC Neutron Detectors for Neutron Flux Monitoring**
Han Soo KIM, Jang Ho HA, Se-Hwan PARK, and Kyu Hong LEE(KAERI)
Cheol Ho LEE(HYU)
- P06D10 An Optimization of Super-Miniature X-ray Target**
Hyun Jin Kim, Hwan Heo, Jun Mok Ha, and Sung Oh Cho(KAIST)
- P06D11 Modeling High Energy (I-131) Pinhole Collimator for Small Animal Gamma Camera by Monte Carlo Simulation**
YoungJun Jung, KyeongMin Kim, JinSu Kim, JiAe Park, Youngsub Lee, A-ram Yoo, and Jongguk Kim(KIRAMS)
Hakjae Lee and Kisung Lee(Korea Univ.,)

P06D12 Evaluation of Characteristics of Fabricated SiC Semiconductor Radiation Detector and Energy Spectrum Measurement

Junesic Park, Han Soo Kim, Hee Sung Shin, Ho-Dong Kim, and Se Hwan Park(KAERI)
Cheol Ho Lee and Yong Kyun Kim(HYU)

P06D13 Miniature X-ray Tube for Electric Brachytherapy Using Carbon Nanotube Field Emitter

Sung Hwan Heo, Hyun Jin Kim, Jun Mok Ha, and Sung Oh Cho(KAIST)

제 7 분과 A

양자공학 및 핵융합기술 (Quantum Engineering and Nuclear Fusion)

좌 장 권혁중(Hyeok-Jung Kwon), 황용석(Yong-Seok Hwang)

발표장소 자작림2

일 정 | 5. 26(목)

- 09:00 Corrosion Resistance Enhancement of WC-Co Hardmetal in NaOH Solution**
Sunmog Yeo and Jae-Won Park(KAERI)
- 09:20 Design and Fabrication of a Prototype Stripline BPM for PEFP Beam Lines**
Ji-ho Jang, Hyeok-jung Kwon, Dae-il Kim, Han-sung Kim, Kyung-jean Min, and Bum-sik Park(KAERI)
- 09:40 Analysis on Radiation Effects of Fusion Material Proposed for ITER First-wall through Particle-beam Irradiation**
Kyung-Min Kim and Myung-Hyun Kim(KHU)
- 10:00 Result of the Beam Test with a 13MHz Cavity**
Tu Anh Trinh, Yong Sub Cho, Hyeok Jung Kwon, Han Sung Kim, and Kyung Tae Seol(KAERI)
- 10:20 Beam Test of the Microwave Ion Source for the 20-MeV Proton Linac**
Dae-Il Kim, Hyeok-Jung Kwon, Han-Sung Kim, Young-Gi Song, and Yong-Sub Cho(KAERI)
- 10:40 Coffee Break**
- 11:00 High Heat Flux Test for the Semi-Prototype Qualification of ITER First Wall**
Suk-Kwon Kim, Eo Hwak Lee, Jae-Sung Yoon, and Dong Won Lee(KAERI)
Byoung-Yoon Kim(NFRI)
- 11:20 Emittance Measurement by Using Electric Sweep Scanner**
Hyeok-Jung Kwon, Han-Sung Kim, Daeil Kim, Ji-Ho Jang, and Yong-Sub Cho(KAERI)
- 11:40 The Improvement of Mechanical and Gloss Property by Dual Ion Beam Irradiation**
Hyuk-Jun Choi, Jae-Sang Lee, and Chan-Young Lee(KAERI)

Ⅲ. 분과별 논제 및 발표자

제 7 분과 B

양자공학 및 핵융합기술 - Poster (Quantum Engineering and Nuclear Fusion)

좌 장 권혁중(Hyeok-Jung Kwon), 홍봉근(Bong-Gun Hong)

발표장소 주목홀

일 정 | 5. 26(목) 13:00-15:00

- P07B01 Fabrication of Three Kinds of Small Mock-ups for an ITER TBM First Wall**
Jae Sung Yoon, Suk Kwon Kim, and Dong Won Lee(KAERI)
- P07B02 Progress on the Korean Test Blanket Module Development for Testing in the ITER**
Dong Won Lee, Eo Hwak Lee, Suk Kwon Kim, Jae Sung Yoon, Seung Jae Lee, and Dong Ju Seo(KAERI)
Seungyon Cho(NFRI)
- P07B03 Development of Optimized Hydrogen Permeation Sensors for Testing the Korean Test Blanket Module in the ITER**
Dong Ju Seo, Eo Hwak Lee, Suk Kwon Kim, Jae Sung Yoon, Seung Jae Lee, and Dong Won Lee(KAERI)
Seungyon Cho(NFRI)
- P07B04 Photocatalytic Hydrogen Production and Enhancement of Reactivity Using Electron Irradiation over Carbon Coated TiO₂**
Sung Oh Cho and Jong Min Kum(KAIST)
- P07B05 Preliminary Test Facility Design of Bubble Formation and Rise Velocity in Liquid Breeder for Testing in the ITER**
Seung Jae Lee, Eo Hwak Lee, Suk Kwon Kim, Jae Sung Yoon, Dong Ju Seo, and Dong Won Lee(KAERI)
Seungyon Cho(NFRI)
- P07B06 Analysis of the Magnetic Field Configuration at the Ohmic Breakdown Phase of a Tokamak**
Min-Gu Yoo, YoungHwa An, Hyunseok Kim, and Yong-Su Na(SNU)
J. H. Kim(NFRI)
- P07B07 Development of Remote Control and Interlock System for the PEFP Microwave Ion Source**
Young-Gi Song, Kyung-Tae Seol, Hyeok-Jung Kwon, Ji-Ho Jang, and Yong-Sub Cho(KAERI)
- P07B08 Design of a Solenoid Magnet for a Microwave Ion Source**
Yong-Sub Cho, Hyeok-Jung Kwon, and Dae-Il Kim(KAERI)
- P07B09 The Performance Analysis and Realization of the Digital LLRF Feedback Control System for PEFP Copper Model of Superconducting Linac**
Ying-Min Li, Ji-HoJang, Hyeok-Jung Kwon, Young-Gi Song, Han-Sung Kim, Kyung-Tae seol, and Yong-Sub Cho(KAERI)
- P07B10 Development of ITER PF6 Coil Assembly Tools and Mock-up Test**
Nam Kyoungoo, Park Hyunki, and Kim Dongjin(NFRI)
Kim Byungseok and Kim Kyungkyu(SFA)
Im Kihak and Robert Shaw(ITER)

제 7 분과 C

양자공학 및 핵융합기술 - Poster (Quantum Engineering and Nuclear Fusion)

좌 장 장지호(Ji-Ho Jang), 조용섭(Yong-Sub Cho)

발표장소 주목홀

일 정 | 5. 26(목) 13:00-15:00

P07C01 Structural Analysis of the Proton Accelerator Research Center in PEFP

Jung-Min Nam, G. P. Jeon, Yi-Sub Min, Sung Sik Park, Jin Sam Cho, Kyeong-Jun Mun, J. H. Cho, and Jun Yeon Kim(KAERI)

P07C02 RF Power Requirements for PEFP SRF Cavity Test

Han-Sung Kim, Kyung-Tae Seol, Hyeok-Jung Kwon, and Yong-Sub Cho(KAERI)

P07C03 Waveguide Layout and Penetration Waveguide Fabrication for the PEFP 100MeV Accelerator

K. T. Seol, H. J. Kwon, H. S. Kim, and Y. S. Cho(KAERI)

P07C04 Design of Slit-Collector System for the PEFP 20MeV Linac

J. S. Hong, H. J. Kwon, D. I. Kim, S. P. Yoon, H. S. Kim, J. H. Jang, and Y. S. Cho(KAERI)
S. J. Noh(DKU)

P07C05 Mapping of Stripline Beam Position Monitor for the PEFP Beam Line

Kyungjean Min, Kyung-Tae Seol, Dae-Il Kim, Han-Sung Kim, Ji-Ho Jang, Hyeok-Jung Kwon, Sung-Su Cha, and Yong-Sub Cho(KAERI)

P07C06 Alignment of Drift Tubes for the 100MeV Proton Linear Accelerator for the PEFP

Bum-Sik Park, Hyeok-Jung Kwon, Han-Sung Kim, and Yong-Sub Cho(KAERI)

P07C07 Fabrication of the Prototype Target Stack and Test Mock-up for the PEFP Radioisotope Production Facility

S. P. Yoon, B. S. Park, H. S. Kim, H. J. Kwon, and Y.S. Cho(KAERI)

P07C08 The Beam Extraction of Ion Source with Curved Electrodes Shape

Chan Young Lee, Jae Sang Lee, Yong Sub Cho, and Byung Ho Choi(KAERI)

P07C09 Design and Construction of a Multi-hole Ar RF Ion Source

I.S. Hong, H. S. Kim, D. I. Kim, H. J. Kwon, and Y. S. Cho(KAERI)

P07C10 Design of Accelerator Emergency Stop System for the Proton Accelerator Research Center of PEFP

Sung Sik Park, Jun Yeon Kim, Jang-Hyung Cho, Kyeong-Jun Mun, Jin Sam Cho, Gye Po Jeon, Yi Sub Min, and Jung Min Nam(KAERI)

Ⅲ. 분과별 논제 및 발표자

제 8 분과 A

원전 건설 및 운영 기술(Nuclear Power Plant Construction and Operation Technology)
- 원전 내진 및 구조(NPP's Structural Engineering)

좌 장 김상윤(Sang Yun Kim), 전영선(CHOON YOUNG-SUN)

발표장소 백당룸

일 정 | 5. 26(목)

- 09:00 Seismic Capacity of RC Shear Wall after Design Life**
Junhee Park, Young-Sun Choun, and In-Kil Choi(KAERI)
- 09:20 The Study on the Deaggregation of Seismic Hazard in the PSHA for the NPP Sites**
Hyun-Me Rhee, Jeong-Moon Seo, Min-Kyu Kim, and In-Kil Choi(KAERI)
- 09:40 Finite Element Model of Large Civil Aircraft Engine for the Evaluation on Its Impact to the Nuclear Power Plant Structures**
Byeong Moo Jin, Yunseok Lee, Se Jin Jeon, and Young Jin Kim(DAEWOO E&C)
- 10:00 Dynamic Model of Electrical Equipment Cabinet Representing the Stiffness Softening Under Strong Seismic Motion**
Sung Gook Cho(JACEKOREA Co.)
Dookie Kim(KNU)
- 10:20 The Seismic Fragility Analysis of a Condensate Storage Tank with Age-Related Degradation**
Young-Sun Choun, Min Kyu Kim, and In-Kil Choi(KAERI)
Jinsuo Nie, Joseph I. Braverman, and Charles H. Hofmayer(BNL)
- 10:40 Coffee Break**
- 11:00 Seismic Probabilistic Safety Assessment along the Acceleration Level**
Jung Han Kim, In-Kil Choi, and Jin-Hee Park(KAERI)
- 11:20 Local Behavior of Reinforced Concrete Slabs to Aircraft Engine Projectile Impact**
Hyeon Kyeong Yoo, Hyun Choi, Chul Hun Chung, and Jungwhhee Lee(DKU)
Sang Yun Kim(KINS)
- 11:40 Simulation of a Local Collision of SC Wall Using High Energy Absorbing Steel**
H. K. Yoo, C. H. Chung, J. Park, and J. W. Lee(DKU)
S. Y. Kim(KINS)
- 12:00 Probabilistic Seismic Hazard Assessment Method for Nonlinear Soil Sites Based on the Hazard Spectrum of Bedrock Sites**
Daegi Hahm, Jeong-Moon Seo, and In-Kil Choi(KAERI)
- 12:20 Fragility Assessment of Piping System in Ulchin 56 NPP Based on JNES Results**
Min Kyu Kim and In-kil Choi(KAERI)

제 8 분과 B

원전 건설 및 운영 기술(Nuclear Power Plant Construction and Operation Technology)- Poster - 원전 건설 및 운영 기술(NPP's Construction and Operation Technology)

좌 장 이덕현(LEE DEOK-HYUN), 송명호(SONG MYUNG-HO)

발표장소 주목홀

일 정 | 5. 26(목) 13:00-15:00

P08B01 Cost Estimation Framework for SMART(SMR)

Jinsam Cho and Jeeyoung Kim(KAERI)

P08B02 Electric Power System Design Status of PEFP

Kyeong-Jun Mun, Sung Sik Park, Jin Sam Cho, Gye Po Jeon, Yi Sub Min, Jung Min Nam, Jun Yeon Kim, and Jang-Hyung Cho(KAERI)

P08B03 Radiation Analysis to Ensure Radiation Safety for the Proton Accelerator Research Center of PEFP

Jun Yeon Kim, Jang-Hyung Cho, Yi-Sub Min, and Kyeong-Jun Mun(KAERI)

P08B04 Proton Accelerator Conventional Facilities Design Status for the Savings of Energy

Jang-Hyung Cho, Jun Yeon Kim, Gye-Po Jeon, and Kyeong-Jun Mun(KAERI)

P08B05 NDE Round Robin Test Results on Cast Austenitic Stainless Steels

Ho-Sang Shin(KINS)
Byung-Sik Yoon(KEPCO RI)

P08B06 Development of Ultrasonic Cleaning Technology for a Nuclear Steam Generator

Woo-tae Jeong and Seok-tae Kim(KEPCO RI)
Ju-kwon Oh and Sang-jung Yoon(Sae-an ENG.)

P08B07 Modification of the Visual Inspection System for Flow Distribution Plates of Nuclear SG

Woo-tae Jeong and Seok-tae Kim(KEPCO RI)
Seok-chul Kang and Young-kug Kim(Sae-an ENG.)

P08B08 Development of Evaluation Technology for Detection of Axial Crack at Eggcrate Intersection of Steam Generator Tube

Myung Sik Choi, Do Haeng Hur, Kyung Mo Kim, Jung Ho Han, and Deok Hyun Lee(KAERI)
Myung Ho Song(KINS)

P08B09 A Study Regarding Evaluation of Impact on Nuclear Power Plants According to Occurrence of Low Voltage in 4.16 KV Bus of Non-Class 1E Electric Power Supply System

Jung, Hyoung Duk(KHNP)
Song, Jong Soon(CSU)

P08B10 Evaluation on Wear Reliability for Delayed Neutron Tubing in Pressurized Heavy Water Reactors

Myung Ho Song and Hong Key Kim(KINS)
Woo Seog Ryu and Young Ho Lee(KAERI)

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- P08B11 Environmental Qualification of F Insulation Class Formwound Motor Winding Using Vacuum Pressure Impregnation**
Kyung-Heum Park, Jong-Seok Kim, Sun-Chul Jeong, and Kyung-Nam Jang(KEPCO RI)
- P08B12 Reliability Verification of DBE Environment Simulation Test Facility by Using Statistics Method**
Kyung-Nam Jang, Jong-Soeg Kim, Sun-Chul Jeong, and Kyung-Heum Park(KEPCO RI)
- P08B13 A Survey of Cable Ageing Management and Condition Monitoring in Nuclear Power Plants**
Cheol-soo Goo, In-young Kim, and Bok-ryul Kim(KINS)
- P08B14 Evaluation of Accelerated Graphitic Corrosion Test of Gray Cast Iron**
Jeong-Hyeon Kim, Jong-Dae Hong, and Changheui Jang(KAIST)
Kyung-Hwan Na and Jae-Gon Lee(KHNP)
- P08B15 Study for Environmental Qualification of 60 Years Life Cable**
Jong-Seog Kim, Sun-chul Jeong, Kyung-Heum Park, and Kyung-Nam Jang(KEPCO RI)
Sung-yull Hong(YU)
- P08B16 Structural Integrity Assessment of the SMART Reactor Pressure Vessel during Heat-up and Cool-down**
Jong Sung Kim(SCNU)
S. G. Lee and S. K. Chung(KEPCO E&C)
M. J. Jhung and Y. H. Ryu(KINS)
- P08B17 Feasibility Study on the Development of 2-channel Embedded Infrared Fiber-optic Sensor for Thermometry of Secondary Water System in Nuclear Power Plant**
W. I. Yoo, K. W. Jang, J. K. Seo, J. Moon, K. -T. Han, and B. Lee(KU)
B. G. Park(SCH)
- P08B18 Preparation and Characterization of Simulated Crud: Effect of Boron Compounds**
E. H. Lee, K. M. Kim, J. W. Na, and W. Y. Maeng(KAERI)
- P08B19 Seismic Fragility Analysis of RC Shear Wall with Age-Related Degradation for Different Failure Criteria**
Junhee Park, Young-Sun Choun, and In-Kil Choi(KAERI)
- P08B20 Response Spectrum and Time History Seismic Analysis of the SMART Reactor Assembly**
Jong Sung Kim(SCNU)
K. H. Oh and K. W. Lee(PRISM Co.,)
M. J. Jhung and Y. H. Ryu(KINS)
- P08B21 Mathematical Justification for Large Mass Method for Dynamic Responses of Two D.O.F. System Excited by Ground Acceleration Time History**
Yong-Woo Kim(SCNU)
Myung Jo Jhung(KINS)
- P08B22 Comparison & Analysis of IEEE 344 and IEC 60980 Standards for Harmonization of Seismic Qualification of Safety-related Equipments**
Youngok Lee(KEPCO E&C)
Jong-Seog Kim(KEPCO RI)
Jeong-Ho Seo and Myung-Jun Kim(KEA)
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P08B23 Seismic Sliding Response Characteristics at Inclined Surface

Tae Myung Shin(CJNU)

P08B24 Analysis of Chloride Ion Penetration for NPP Concrete Structures by Crack

D. G. Kim, J. H. Lee, H. J. Lee, and K. B. Kim(KICT)

H. R. Jung(KRMC)

Ⅲ. 분과별 논제 및 발표자

제 8 분과 C

원전 건설 및 운영 기술(Nuclear Power Plant Construction and Operation Technology)

- 원전 설계, 제작/설비 경년열화 관리(NPP's Design, Manufacture/Equipment Aging Management)

좌 장 김용규(Kim, Yong Kyu), 김낙철(kim nak-cheol)

발표장소 자작룸2

일 정 | 5. 27(금)

- 09:00 Deterministic Hydraulic Load Analysis on Reactor Internals of APR1400**
Kyu Hyung Kim, Do Young Ko, and Ja Yeong Gu(KHNP)
- 09:20 Development of the APR+ Auxiliary Building General Arrangement (GA)**
Hyung-Keun Moon, Young-Sheop Park, and Yong-Chul Kang(KHNP)
- 09:40 The Design Characteristics of APR+ NSSS**
Eui-Jong Lee, Joong-Soo Yoon, and Yong-Chul Kang(KHNP)
- 10:00 Study of Head-loss Effect for ECCS Strainer Design Variables with Debris Condition**
Sung Myung Lee, Jong Wook Lee, and Won Seok Kim(BUMWOO)
Sang Il Lee(Hyundai ENG)
Chang Hyun Kim and Sang Yeol Kim(KHNP)
- 10:20 Development of Aging Management Program for Non-EQ Electrical Cables and Non-metallic Connections in Nuclear Power Plants**
Che-Wung Ha, Woo-Sang Lim, and Kwang-Ho Joo(KHNP)
- 10:40 Coffee Break**
- 11:00 Development of DB Linker to Connect the Main DB System to Fatigue Evaluation and Monitoring System**
Wanjae Kim and Jongjooh Kwon(KEPCO RI)
Sung-Yull Hong(YU)
- 11:20 VLF Tan Delta Measurement for Used XLPE Power Cables**
Woo-Sang Lim, Che-Wung Ha, and Kwang-Ho Joo(KHNP)
- 11:40 Effect of Cooling Rate on Tensile Properties and Cracking of Ni₃Fe Alloy**
Young Suk Kim, Sung Soo Kim, and Dae Hwan Kim(KAERI)
- 12:00 Safety Enhancement and Change of Codes and Standards of NPPs during One Cycle PSR**
Younggab Kim, Sang Joon Lee, and Bongyo Yun(KHNP)
- 12:20 Development of Managing Program for Small Bore Piping Socket Weld on the Secondary System of NPP**
Lee Dong Min, Ryu Jong Myeong, Cho Hong Seok, Cho Ki Hyun, and Choi Sang Hoon(KEPCO KPS)
Kim Man Hee(KHNP)

제 8 분과 D

원전 건설 및 운영 기술(Nuclear Power Plant Construction and Operation Technology)

- 원전 설계, 제작, 건설, 운전 및 정비 기술(NPP's Design, Manufacture, Construction, Operating & Maintenance Technology)

좌 장 신선동(Shin, Sun Dong), 이정수(Lee, Jeong Soo)

발표장소 백당룸

일 정 | 5. 27(금)

- 09:00** **Comparison of Nuclear Fuel Management at U.S. Nuclear Utility and KHNP**
Ji-Eun Jung and Sung-Tae Yang(KHNP)
- 09:20** **Performance Evaluation and Suggestion of Upgraded Fuel Handling Equipment for Operating OPR1000**
Sang-Gyoon Chang, Jeung-Ki Hwang, and Taek-Sang Choi(KEPCO E&C)
Eun-Seok Na, Myung-Lyul Lee, Seung-Jin Baek, and Man-Su Kim(KHNP)
Jack Kunik(PRN)
- 09:40** **Experimental Parameter Study for Residual Stress Improvement on 6inch Pipe Butt Weld By MeSIA®**
Hong Seok Cho, Ki Hyun Cho, and Min Hwan Mo(KEPCO KPS)
- 10:00** **A Comparative Study of MR Functions Identified in a Two-unit CANDU Plant**
Tae Young Ju and Seung Ku Hong(KHNP)
- 10:20** **Insight from Pilot On-line Maintenance for an Essential Chilled Water System in a Westinghouse Plant**
Hee Seung Chang, Jin Woo Hyun, and Jung Wun Kim(KHNP)
- 10:40** **Coffee Break**
- 11:00** **Spatial Variation of Hydrodynamic Mass Coefficients for Tube Bundle in a Cylindrical Shell**
Keum-Hee Yang and Ki-Wahn Ryu(CBNU)
Chi-Yong Park(KEPCO RI)
- 11:20** **Temperature Dependence of Dynamic Fracture Toughness for SA106 Gr.C Steel**
Jin Weon Kim and Sa Yong Lee(CSU)
Hong Deok Kim(KEPCO RI)
- 11:40** **High Cycle Thermal Fatigue Analysis for a Mixing Tee in Safety Injection and Shutdown Cooling System of SKN Unit 3 and 4 Power Plant**
Kyeong Jin Yang, Dong Jae Lee, Dae Soo Kim, and Man Gil Huh(KEPCO E&C)
- 12:00** **A Study on the Wall Thinning Management of Small Bore Carbon Steel Piping in Nuclear Power Plants**
Dae Young Lee and Kyeong Mo Hwang(KEPCO E&C)

Ⅲ. 분과별 논제 및 발표자

제9분과A

원자력정책, 인력 및 협력 - Poster (Nuclear Policy, Human Resources and Cooperation)

좌 장 정윤형(CHUNG, Yoon-Hyung), 정환삼(Whan-Sam CHUNG)

발표장소 주목홀

일 정 | 5. 26(목) 13:00-15:00

- P09A01 A Review of Strategies for Development and Revision of IAEA Safety Standards**
Jun Su Ha and Ingoo Kim(KINS)
- P09A02 Introduction of Function Modeling Technique to Nuclear Safety Regulation**
Y. E. Lee, H. S. Chang, J. M. Yang, S. H. Kim, S. T. Kim, C. Sheen, and S. K. Lee(KINS)
- P09A03 Economics of the Nuclear Energy Considered CO₂ Emission**
Su-Jin Kim and Yong-Min Kim(CU)
- P09A04 A Study on Status of the GIF and its Korea Activities for the Development of the Generation IV Nuclear Energy System**
S. Y. Chang and H. J. Park(NRF)
J. H. Lee(KAERI)
- P09A05 Introduction to KHNP's Informal Learning**
Suh, Jang-soo, Kim, Duck-nyoun, Goo, Ja-sung, and Jeong, Yeon-oh(KHNP)
- P09A06 Nuclear Regulatory Body's Performance Indicators in Enhancing Effectiveness: A Review Based on OECD/NEA Perspective**
Ridha Bin Roslan(KAIST)
Kwang-Sik Choi(KINS)
- P09A07 The Independence of Vietnam Regulatory Body**
Anh Hoang Nguyen(KAIST)
Kwang Sik Choi(KINS)
- P09A08 Regulatory Strategy for Enhancing Safety Culture of NPP Operator in Pakistan**
Irfan Younus(KAIST)
Kwang Sik Choi(KINS)
- P09A09 Regulatory Activities on Civil Nuclear Safety Equipments in China**
Lu Gaoshang(KAIST)
Kwang Sik Choi(KINS)
- P09A10 Regulatory Competence Building Framework for Nuclear Facilities in Mongolia, Status Review and Suggestion**
Nyamdavaa Enkhgerel(KAIST)
Kwang Sik Choi(KINS)

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- P09A11 Necessity of Integrated γ Detector Development to Improve National Safeguards System**
Ki Hyun Kim(KINAC)
- P09A12 Development of a Prototype for the Export Control List Management System**
GwanYoung, Kim(KINAC)
- P09A13 Analysis for the NSG Fundamental Review of Controlled Items**
Sun-do Choi(KINAC)

Ⅲ. 분과별 논제 및 발표자

제 9 분과 B

원자력 정책, 인력 및 협력 (Nuclear Policy, Human Resources and Cooperation)

좌 장 이태준(LEE, Tae Joon), 유동한(YU, Donghan)

발표장소 자작률1

일 정 | 5. 27일(금)

- 09:00 The Revision of ROK-U.S. Nuclear Cooperation Agreement: A Comparative Study on U.S.-Japan Accord Case**
Hyun Yub Noh and Un Chul Lee(SNU)
- 09:20 Development of Checklist for Self-Assessment of Regulatory Capture in Nuclear Safety Regulation**
K. S. Choi, Y. E. Lee, H. S. Chang, and S. J. Jung(KINS)
- 09:40 Consideration on the Enhancement of Nuclear Crisis Communication Based on the State-of-the-Art of Other Spheres of Pubic Concerns**
Chang-Ju Lee and Yeon-Hee Hah(KINS)
- 10:00 A Qualitative Study on Low Public Acceptance of Nuclear Power in Terms of Communication Problems**
Sub Lee Song, Sang Ho Kim, and Soon Heung Chang(KAIST)
- 10:20 Cost Effective Ways of Implementing Nuclear Power Programme in African Countries**
Abraham Aderoju(KAIST)
Kwang Sik Choi(KINS)
- 10:40 Coffee Break**
- 11:00 Effective Separation between Regulatory Function and Promotional Function in the Government of Uganda**
Sabbiti Baguma(KAIST)
Kwang Sik Choi(KINS)
- 11:20 Review of Safety and Security of Radioactive Sources in Africa**
Shadrack Anthony Kiti(KAIST)
Kwang Sik Choi(KINS)
- 11:40 Development of Risk Assessment Methodology for State's Nuclear Security Regime**
Sung Soon Jang, Hyungmin Seo, Jung-ho Lee, and Sung-Woo Kwak(KINAC)

제 10 분과 A

원자력계측제어 및 자동원격 (Nuclear I&C and Automatic Remote Systems)

좌 장 허균영(Gyunyong Heo), 이철권(Cheol-Kwon Lee)

발표장소 정향룸

일 정 | 5. 26일(목)

- 09:00 A Study on EEG Analysis in and Human Error Potential while Using a Digital Device in NPPs**
Oh Yeon Ju and Lee Yong Hee(KAERI)
- 09:20 Development Methodology of a Cyber Security Risk Analysis and Assessment Tool for Digital I&C Systems in Nuclear Power Plant**
K. H. Cha, C. K. Lee, J. G. Song, Y. J. Lee, J. Y. Kim, J. W. Lee, and D. Y. Lee(KAERI)
- 09:40 Lessons Learned from System Integration and Testing for PMAS**
Jeong-Kweon Lee, Yong-Chul Shin, and Jang-Sik Moon(KEPCO E&C)
- 10:00 Minimum DNBR Prediction Using Artificial Intelligence**
Dong Su Kim, Ju Hyun Kim, and Man Gyun Na(CSU)
- 10:20 Design of Service Oriented Architecture(SOA)-based Software Vulnerability Analysis Method for Digital I&C System in NPP**
J. G. Song, C. K. Lee, and K. C. Kwon(KAERI)
K. H. Kim(SHINSEGAE I&C)
S. S. Kim(HNU)
- 10:40 Coffee Break**
- 11:00 Verification Process of Behavioral Consistency between Design and Implementation Programs of pSET Using HW-CBMC**
Dong-Ah Lee, Jong-Hoon Lee, and Junbeom Yoo(KU)
- 11:20 Approach to Modeling of Fault-tolerant Techniques Using Fault Tree**
Bo Gyung Kim, Hyun Gook Kang, and Poong Hyun Seong(KAIST)
Seung Jun Lee(KAERI)
- 11:40 Guideline for Bayesian Net Based Software Fault Estimation Method for Reactor Protection System**
Heung-Seop Eom, Gee-Yong Park, and Seung-Cheol Jang(KAERI)

Ⅲ. 분과별 논제 및 발표자

제 10 분과 B

원자력계측제어 및 자동원격 - Poster (Nuclear I&C and Automatic Remote Systems)

좌 장 공영호(Youngho Gong), 김지현(JiHyeon Kim)

발표장소 주목홀

일 정 | 5. 26(목) 13:00-15:00

- P10B01 The Calibration of the Fuel Central Temperature System in Fuel Test Loop**
Chang-Young Joung, Sung-Ho Ahn, Chul-Yong Lee, and Bong-Sik Sim(KAERI)
- P10B02 The Study on the Fracture Characteristic for the Nuclear Structural Material Using Acoustic Emission**
Jun-Young Nam, Sang-Yun Lee, Woong-gi Hwang, and Boyoung Lee(KAU)
- P10B03 Replacement of Neutron Detectors for RPS and RRS of HANARO**
Hyung Kyoo Kim, Yeong San Choe, Young Ki Kim, Hoan Sung Jung, Joong Hee Lee, and In Cheol Lim (KAERI)
- P10B04 Comparison of EMI/RFI Requirements to Qualify the Equipments for Nuclear Power Plant (RG 1.180, EPRI TR 102323, IEC 62003 and GB/T 11684)**
Tae-Heon Jang(KTL)
Jong-Seog Kim(KEPCO RI)
Jeong-Ho Seo and Kyoung-Youn Cho(KEA)
- P10B05 Analysis of LOAF(Loss of All Feed Water) Accident Using OPR1000 Simulator**
Do Hyun Hwang, Myeong Soo Lee, Jin Hyuk Hong, and Su Jin Byon(KEPCO RI)
- P10B06 Simulation of SMART Startup Operation**
Seong Wook Lee, Kyoo Hwan Bae, and Suh Choi(KAERI)

제 10 분과 C

원자력계측제어 및 자동원격 (Nuclear I&C and Automatic Remote Systems)

좌 장 강현국(Hyungook Kang), 정연섭(Yeonsub Jung)

발표장소 정향룸

일 정 | 5. 27(금)

- 09:00 An Introduction of Behavior-based Safety Program in Nuclear Power Plants**
Yonghee Lee and Yong-Hee Lee(KAERI)
Hyeon-Kyo Lim(CBNU)
- 09:20 Understanding Team Communication Characteristics Using Social Network Analysis**
Ar Ryum Kim, Seung Woo Lee, and Poong Hyun Seong(KAIST)
Jin Kyun Park((KAERI)
- 09:40 Load-following Operation for PWRs Using Fuzzy Model Predictive Control**
Sim Won Lee, Jae Hwan Kim, and Man Gyun Na(CSU)
Keuk Jong Yu(KHNP)
- 10:00 Performance Test of System Identification Methods for a Nuclear Reactor**
Keuk Jong Yu and Han Gon Kim(KHNP)
- 10:20 Analysis of One Feedwater Pump Stop Event of KALIMER-600**
Seung-Hwan SEONG, Han-Ok KANG, and Seong-O KIM(KAERI)
- 10:40 Coffee Break**
- 11:00 Conceptual Design of a Combined Power Generation Unit at the NPP Seaside**
Kyung H. Cha(KAERI)
- 11:20 A Nuclear Safety System based on Industrial Computer**
Ji-Hyeon Kim, Do-Young Oh, Nam-Hoon Lee, Chang-Ho Kim, and Jae-Hack Kim(KEPCO E&C)