

춘계 Hybrid 학술발표회

2021. 6. 2(수) ~ 4(금)

| 온 라 인 |  www.krs.or.kr

 Zoom

| 오프라인 | 동국제강연수원 후인원

KOREAN
RADIOACTIVE WASTE
SOCIETY

2021



사단 한국방사성폐기물학회
법인 Korean Radioactive Waste Society

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한국방사성폐기물학회 제9대 임원 및 제5대 연구분과위원회

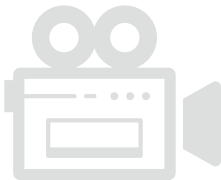
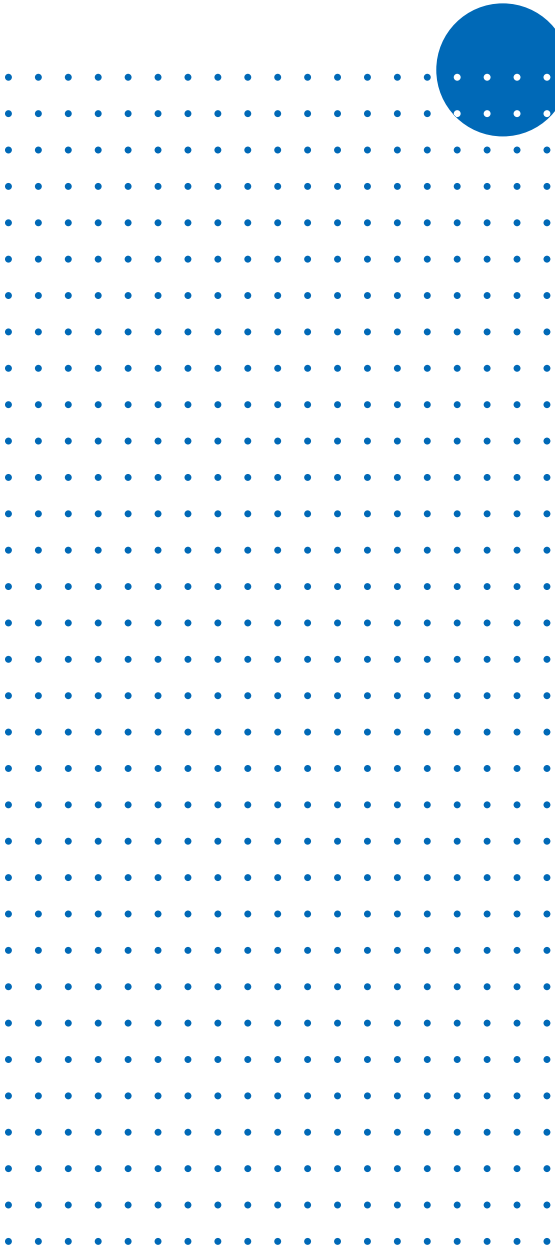
제9대 임원

회 장	김경수 [(재)사용후핵연료관리핵심기술개발사업단]	
감 사	송종순 [조선대학교]	박원재 [한국원자력안전기술원]
부회장	강문자 [한국원자력연구원]	정찬우 [한국원자력안전기술원]
	윤종일 [한국과학기술원]	손순환 [한국수력원자력(주)]
	최광섭 [(前)한국원자력환경공단]	
총무이사	조동건 [한국원자력연구원]	윤희준 [한국전력기술(주)]
재무이사	서범경 [한국원자력연구원]	이성기 [한전원자력연료(주)]
편집이사	이한수 [한국원자력연구원]	박병기 [순천향대학교]
학술이사	정재학 [경희대학교]	엄우용 [포항공과대학교]
사업이사	이희환 [한국수력원자력(주)]	김성수 [두산중공업(주)]
국제협력이사	김희령 [울산과학기술원]	최성열 [한국과학기술원]
대외협력이사	구정희 [한국원자력연구원]	이상진 [한국원자력환경공단]
무임소 이사	문주현 [단국대학교]	안상면 [한국원자력안전기술원]
	채병곤 [한국지질자원연구원]	김낙점 [한전KPS]
	김효정 [부산대학교]	
기술정책연구소장	김창락 [한국전력국제원자력대학원대학교]	
고 문	김창락 [한국전력국제원자력대학원대학교]	송기찬 [한국원자력연구원]



제5대 연구분과위원회

분과명	분과위원장	간사
핵주기정책·규제 및 비확산	안성규 [한국원자력연구원]	한재준 [한국원자력통제기술원]
사용후핵연료처분전관리	김용덕 [한수원(주)중앙연구원]	김기영 [한수원(주)중앙연구원]
고준위폐기물처분	김건영 [한국원자력연구원]	김진섭 [한국원자력연구원]
중저준위폐기물관리	조천형 [한국원자력환경공단]	권기정 [한국원자력환경공단]
제염해체	김천우 [한수원(주)중앙연구원]	황종선 [한수원(주)중앙연구원]
방사선환경 및 안전	서경석 [한국원자력연구원]	지영용 [한국원자력연구원]
방사화학	박태홍 [한국원자력연구원]	임상호 [한국원자력연구원]

학술발표회 정보



1. 한국방사성폐기물학회 <2021 춘계학술발표회> 개요

2021. 6. 02(수) ~ 04(금)
 | 온 라 인 |  www.krs.or.kr,  Zoom
 | 오프라인 | 동국제강연수원 후인원

참가 등록비 안내

		하이브리드학술대회			
		사전등록(5.03~21)		일반등록(5.22~)	
구 분		'20추계 미등록자	'20추계 등록자	'20추계 미등록자	'20추계 등록자
회 원	평생회원, 정회원A	13만원	8만원	15만원	10만원
	정회원B	18만원	13만원	20만원	15만원
	정회원C	19만원	14만원	21만원	16만원
	학생회원	7만원	4만원	9만원	6만원
비회원	일반	20만원	15만원	22만원	17만원
	학생	8만원	5만원	10만원	7만원
워크숍	일반	5만원			
	학생	3만원			

- ★ '2020 춘계학술발표회' 등록자의 경우, 정회원 사전등록 기준 약 40% 할인 적용
- ★ 논문발표자(포스터 포함)는 발표유형 및 학회 참석여부에 관계없이 논문발표비로 필히 참가등록비를 납부하여야 합니다.

회원회비 및 구분 안내

회원구분	가 입 비	회 비	비 고
학생회원	5천원	연 5천원	대학생 및 대학원 재학생
정 회 원	2만원	연 5만원	정회원 A: 2021년도 연회비 납부자 정회원 B: 2021년도 연회비 미납자 정회원 C: 2020~2021년도 연속 연회비 미납자
평생회원	2만원	50만원	정회원 연회비 10년치 분을 일시불로 납부한 자

2. 전체 행사 일정

2021. 6. 02(수) 09:00 ~ 04(금) 18:00

6월 2일(수) ~ 4(금)			
All-day	분과별 포스터발표	E-Conference (www.krs.or.kr)	
6월 2일(수)		On-Line	On-Site
10:00~11:30	개회식 및 시상식 / 특별강연	Zoom	3F 인재실
14:00~18:00	워크숍 A. International Workshop on Decommissioning Experience and Lessons Learned	Zoom	3F 인재실
13:00~17:00	워크숍 B. 방사성폐기물 핵종분석 역량강화	Zoom	3F 혁신실
6월 3일(목)		On-Line	On-Site
09:00~15:20	제3분과 <고준위폐기물처분>분과 구두발표	Zoom	3F 혁신실
09:00~16:00	제5분과 <제염해체>분과 구두발표	Zoom	3F 인재실
09:00~12:00	제6분과 <방사선환경 및 안전>분과 구두발표	Zoom	4F 현인실
13:00~15:40	제2분과 <사용후핵연료 처분전관리>분과 구두발표	Zoom	4F 현인실
6월 4일(금)		On-Line	On-Site
09:00~12:00	제1분과 <핵주기정책·규제 및 비확산>분과 구두발표	Zoom	3F 인재실
	제4분과 <중·저준위폐기물관리>분과 구두발표	Zoom	3F 혁신실
	제7분과 <방사화학>분과 구두발표	Zoom	4F 현인실

※ 오프라인 행사장 참석대상 제한안내 : COVID-19 방역지침 준수를 위하여 오프라인 행사장 참석대상은 주요임원, 수상자, 워크숍 사회자 및 발제자, 분과별 좌장 및 발표자, 연구분과위원으로 제한되오니 이점 양해 부탁드립니다.

3. 개회식 일정



- 일 시 2021. 6. 2(수) 10:00
- 장 소 동국제강연수원 후인원 3F 인재실

일 정	프 로 그 램
10:00~10:10	개회사 [김경수 학회장]
10:10~10:30	시상식 (우수발표논문상, 우수포스터상, 인기포스터상)
10:30~11:30	특별강연 (재)사용후핵연료핵심기술개발사업단 김경수 단장 『사용후핵연료 관리 기술개발 현황』

4. 논문발표 일정



- 온 라 인 E-Conference(www.krs.or.kr), Zoom
- 오프라인 동국제강연수원 후인원

ORAL 발표(On-Site, Zoom Live)			
6.03(목)	09:00~15:20	제3분과 고준위폐기물처분	3F 혁신실
	09:00~16:00	제5분과 제염해체	3F 인재실
	09:00~12:00	제6분과 방사선환경 및 안전	4F 현인실
	13:00~15:40	제2분과 사용후핵연료 처분전관리	4F 현인실
6.04(금)	09:00~12:00	제1분과 핵주기정책·규제 및 비확산	3F 인재실
		제4분과 중저준위폐기물관리	3F 혁신실
		제7분과 방사화학	4F 현인실
POSTER 발표(E-Conference)			
6.02(수) ~ 6.04(금)		E-Conference(www.krs.or.kr)	

5. 온라인 참여 안내

※ 회 원 : 회원 아이디 및 비밀번호로 로그인
※ 비회원 : 휴대폰 번호로 발송되는 개인별 인증번호로 로그인

2021. 06. 02(수) 09:00 ~ 04(금) 18:00 www.krs.or.kr

E-Conference(www.krs.or.kr) 참여 안내

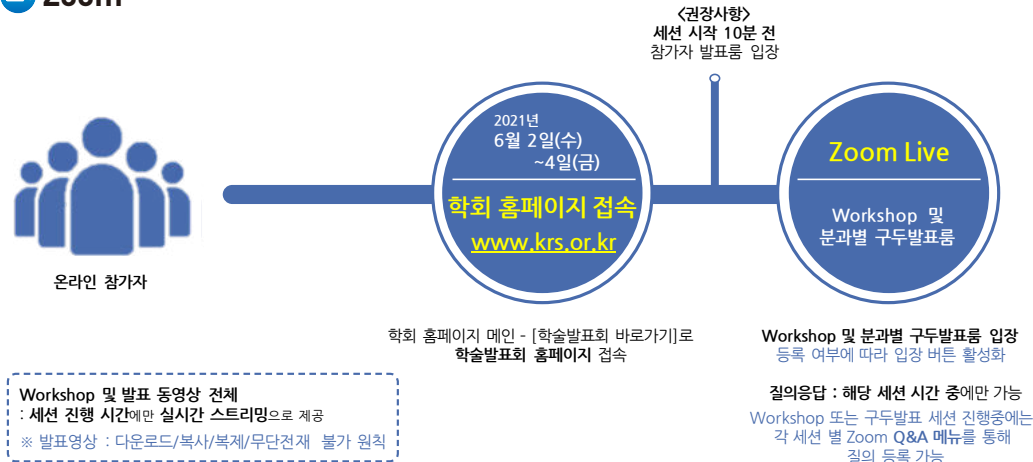
- E-Conference 접속시 크롬(Chrome)브라우저 또는 Internet Explore 11 이상을 추천합니다.
- 등록자 1인 1계정 로그인이 가능합니다. (중복로그인은 불가능합니다.)
- 논문발표내용은 등록자에 한해, KRS 2021 춘계학술발표회 기간(2021. 06. 02(수) 09:00 ~ 04(금) 18:00, 3일간) 동안 희망하는 시간에 자유롭게 스트리밍으로 시청하실 수 있으며, 행사기간 종료후에는 서비스되지 않습니다.

※ 발표자료 : 복사 / 복제 / 무단전제 불가 원칙

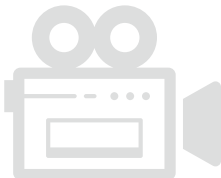
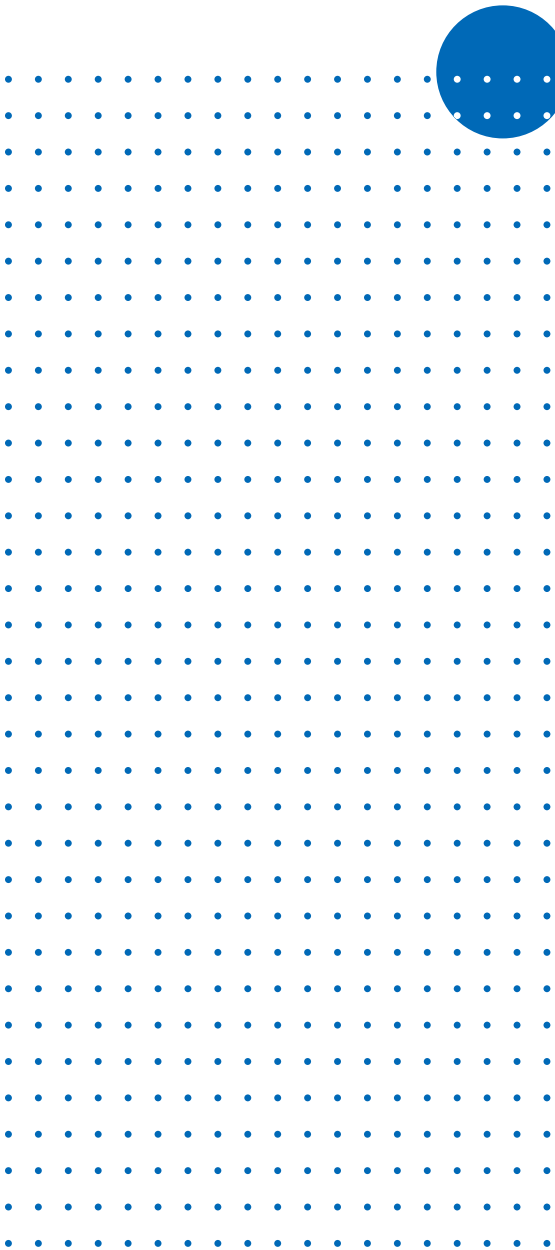


★ 인기포스터논문을 추천해 주시는 분들을 대상으로 행운권 추첨을 진행하오니 많은 참여 부탁드립니다!!

Zoom



Workshop



Workshop
A

International Workshop on Decommissioning Experience and Lessons Learned



- ◆ **Date** June 2(Wed.), 2021
- ◆ **Venue** 3F Injaesil
- ◆ **Organized by** D&D Committee of KRS

Chaired by : Cheon-Woo Kim

14:00~14:10	Welcome Address	Dr. Kyoung-Soo Kim [President of KRS]
Session I		
14:10~14:45	Practices for Segmentation of Activated Components and Structures	Dr. Rick Reid [EPRI]
14:45~15:25	Advanced Nuclear Fuel Cycle Developments in the UK	Dr. Clint Sharrad [U. of Manchester]
15:25~16:05	Deep Eutectic Solvents: Towards New Decommissioning Strategies Using Tunable Solvents	Dr. James Amphlett [KAIST]
16:05~16:15	Break Time	
Session II		
16:15~16:40	Practices for Management of Metal Waste	Dr. Rick Reid [EPRI]
16:40~17:20	Decommissioning Technology and Current Status of the UK Nuclear Facility	Dr. Richard I. Foster [KAERI]
17:20~18:00	Current Status and Business Opportunity of PHWR Decommissioning	Mr. Kyoung Chul Lee [KHNP]

- ◆ **Registration Fee** Standard KRW 50,000
Student KRW 30,000
- ◆ **The Registration Fee Includes PDF file of Proceedings.**

Workshop
B

방사성폐기물 핵종분석 역량강화



- 일시 2022. 6. 2(수) 13:00
- 장소 3F 혁신실
- 주관 한국방사성폐기물학회 방사화학 연구분과
- 주최 한국원자력연구원 방사성폐기물화학분석센터, (사)한국방사능분석협회
- 일정 및 내용

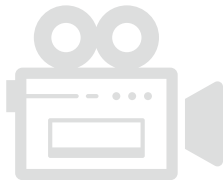
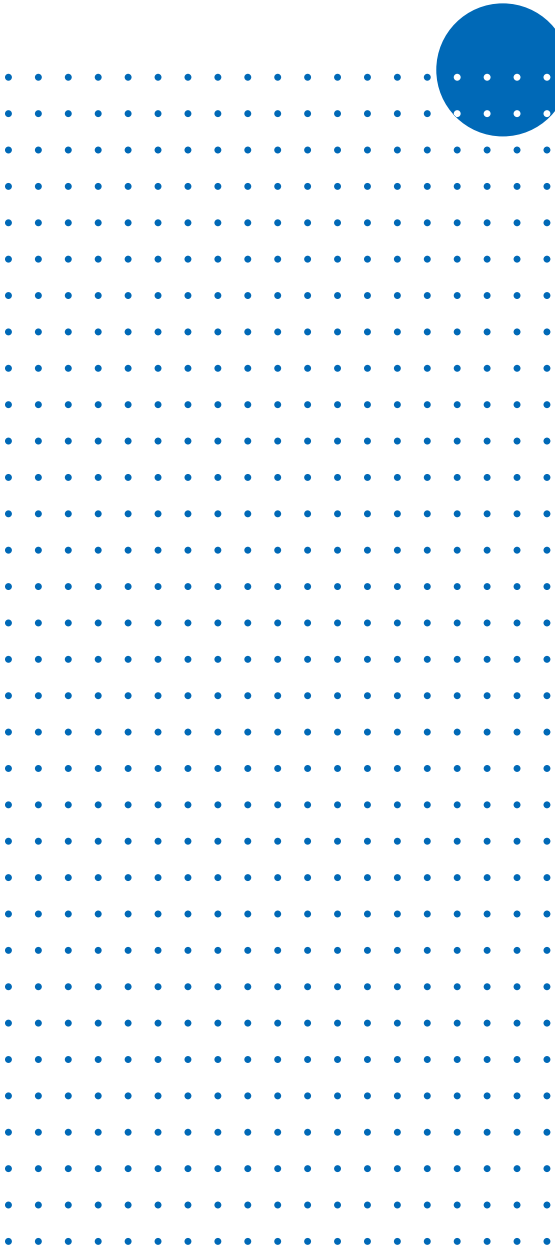
13:00~13:10 개회사

주 제 발 표

13:10~13:40	중·저준위방사성폐기물 특성평가를 위한 품질관리기준	장현기 [한국원자력환경공단]
13:40~14:10	중앙연구원 방사성폐기물 핵종분석 현황	정가희 [한수원중앙연구원]
14:10~14:40	원자력연구원 방사성폐기물 핵종분석 현황	박태홍 [한국원자력연구원]
14:40~15:00	Break Time	
15:00~15:30	한국방사능분석협회 소개 및 발전방향	오정석 [(사)한국방사능분석협회]
15:30~16:00	방사능 분석기관의 KOLAS 운영	유재룡 [한국원자력의학원]
16:00~16:40	핵종분석 역량 강화를 위한 토의(질의/응답)	
16:40~17:00	폐 회	

- 등록비 일반 5만원/인, 학생 3만원/인
- 자료집 파일 제공

분과별 논제 및 발표자



제1분과. 핵주기정책·규제 및 비확산 ORAL

Nuclear Fuel Cycle Policy, Regulation and Non- Proliferation

| 좌장 |곽성우[KINAC], 박세환[KAERI]

6. 4(금) 09:00 ~ 12:00

3F 인재실

발표시간	논문제목 / 저자(소속)
09:00~ 09:20	DPRK Delivery Systems in Association With Nuclear Detonations Yongsoo Hwang [KAERI]
09:20~09:40	Modeling of Gas Centrifuge Cascades for Estimating the Production of Nuclear Material Yonhong Jeong, Seung Ho Jeong, Yein Seo, Nam Kyung Kim, Junghyun Lee [KINAC]
09:40~10:00	Safeguards Implementation of the Radioactive Waste Containing the Nuclear Material Seungmin Lee, Donghyuk Lim [KINAC]
10:00~10:20	Radio Active Waste Storage Facility Located in Nuclear Power Plant and Physical Protection Sangcheol Hyung [KINAC]
10:20~10:40	Break Time
10:40~11:00	Development of Safeguards Technical Report for the Small Modular Reactor in Korea Joo Hyung Moon [KAERI]
11:00~11:20	Development of Real-time Isotope Detection Method for Nuclear Forensics Using Laser-induced Breakdown Spectroscopy Sung-Uk Choi, Jong-Il Yun [KAIST]
11:20~11:40	The Status of Compliance Program Implementation Practices at KAERI Mun-Young Ryu, In-Chul Kim, Byung-Doo Lee, Sung-Ho Lee, Hyun-Jo Kim, Hyun-Sook Kim, Juang Jung, Sung-Mi Han, Jin-Ha Choi [KAERI]
11:40~12:00	Study on Enhancing the Use of Unstructured Open-Source Information for Nonproliferation Monitoring Based on a Text Mining Approach Junghyun Lee, Hojung Do, Minsoo Kim [KINAC]

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제1분과. 핵주기정책·규제 및 비확산 POSTER

Nuclear Fuel Cycle Policy, Regulation and Non- Proliferation

| 심사위원 | 정연홍[KINAC], 서희[전북대]

◆ 6. 2(수) 09:00 ~ 4(금) 18:00

◆ E-Conference(www.krs.or.kr)

포스터번호표	논문제목 / 저자(소속)
1-P-01	Case Study of Safeguards on a Small Amount of Nuclear Material Ickhyun Shin [KINAC]
1-P-02	Development of Optical Fiber Visual Inspector for Spent Fuel Verification Seunghoon Park [KINAC]
1-P-03	A Study on Application of AI Recognition Technology to Nuclear Import and Export Control Beomseok Shin [KINAC]
1-P-04	Study on Application of Regions With Convolutional Neural Networks (R-CNN) and X-Ray Image-Based Object Detection Model to Identification of Trigger List Items Beomseok Shin [KINAC]
1-P-05	A Development of Integrated Export Control System for Improvement of Nuclear Strategic Items Control Mun-Young Ryu, In-Chul Kim, Byung-Doo Lee, Sung-Ho Lee, Hyun-Jo Kim, Hyun-Sook Kim, Juang Jung, Sung-Mi Han, Jin-Ha Choi [KAERI]
1-P-06	The Nuclear Industry Information Collection and Analysis System Sangjun Lee, Sujeong Kim [KINAC]
1-P-07	Study on the Improvement of Strategic Technology Transfer Management for Nuclear Plant Technology Export License Seunghyo Yang [KINAC]
1-P-08	Study on Need to Introduce Korean Obligation Code for Managing Nuclear Materials Subject to Nuclear Cooperation Agreement Seunghyo Yang [KINAC]
1-P-09	Importance of Physical Protection – Cybersecurity Interface and Development of Related Training Program Yeonwook Kang, Byungwoo Sin [KINAC]

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포스터번호표	논문제목 / 저자(소속)
1-P-10	Preparation for Domestic Regulation Standard Related to Safeguards Implementation of Nuclear Facility in Decommissioning Wonjong Song [KINAC]
1-P-11	Analytical Method to Determine the Mass of Uranium Based on Active Neutron Multiplicity Counting Heejun Chung [KINAC]
1-P-12	An Analysis of Training Requirements by DACUM Method in the Course for Fuel Cycle-related Researchers of NNT Byungwoo Shin [KINAC]
1-P-13	Comparision of Penal Provisions on Sabotage for Radio Active Waste Facilities Sangcheol Hyung [KINAC]
1-P-14	Analysis of Anti-Sabotage Measures for Nuclear Facilities Seungsik Yu, In Seon Back [KINAC]
1-P-15	Force-on-Force Exercise and Evaluation for the Prevention of Sabotage in Nuclear Facilities Seungsik Yu [KINAC]
1-P-16	The Status of Expanded Declaration in Accordance With Additional Protocol at KAERI Jinha Choi, In-Chul Kim, Byung-Doo Lee, Sung-Ho Lee, Hyun-Jo Kim, Hyun-Sook Kim, Juang Jung, Seongmi Han, Mun-Young Ryu [KAERI]
1-P-17	Measurement of Gadolinium Isotopes Using Laser Ablation and Laser Induced Fluorescence Se-Hwan Park, Euo-Chang Jung [KAERI]
1-P-18	An Estimation of Fissile Material Production Based on Operating Scenario Assumptions From the 5 MWe Yong-Byon Graphite-Moderated Reactor by MCNP6 and SCALE6 Calculation Wonsik Jung, Kyehong Kim, Geehyun Kim [Seoul Natl. Univ.]
1-P-19	Development of Active Seal on Real-Time for Safeguard Goal Jung-ki Shin, Sangyong Kim, Jiyeon Namgung [Neosiskorea], Hee Seo [Jeonbuk Natl. Univ.]
1-P-20	Uncertainty in the Economics of the Nuclear Fuel Cycles Hyo On Nam, Hong Jang [KAERI]

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포스터번호표	논문제목 / 저자(소속)
1-P-21	Investigation of the Effect of the GIS Thematic Map on the Segmentation Quality to Improve the Change Detection Accuracy for Countering Nuclear Proliferation Nam Kyung Kim, Sang Wook Park, Hoseong Choi [KINAC]
1-P-22	Preliminary Study on the Change Detection for Uranium Tailing Piles With Utilizing Target Detection Results for Nuclear Nonproliferation Hoseong Choi, Nam Kyung Kim [KINAC]
1-P-23	A Study on the Threat Assessment of Domestic Nuclear Facilities by Establishing Peer Groups Using OECD Member States Inseon Back, Seungsik Yu [KINAC]
1-P-24	A Study on the Nighttime Evaluation Plan for Physical Protection Exercise Seungsik Yu, In Seon Back [KINAC]
1-P-25	Considerations for Developing a Strategy for Japan’s Decision to Release Fukushima Water Into the Ocean Jaeun Choi [KONICOF]
1-P-26	Infrastructure of State Regulation in the Field of Atomic Energy in KAZAKHSTAN Alexandr Kim, KwanSeong Jeong [KAERI]
1-P-27	Societal and Environmental Impact Analysis of Different Nuclear Fuel Cycle Scenarios Won Il Ko, Hong Jang, Hyo On Nam [KAERI]

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제2분과. 사용후핵연료 처분전관리 ORAL

Predisposal Management of Spent Nuclear Fuel

| 좌장 | 김형구[KEPCO NF], 김태현[KHNP-CRI]

6. 3(목) 13:00 ~ 15:40

3F 현인실

발표시간	논문제목 / 저자(소속)
13:00~13:20	OASIS Canister Models of the Damaged Spent Fuel Storage for Kori-1,2 Joon Gi Ahn, Young Tae Han, Myeong Hoon Lee [KEPCO E&C]
13:20~13:40	Investigation of Dissolution Behavior of SrO in Molten LiCl Salt at 923 K Dokyuu Kang, James T. M. Amphlett, Sungeol Choi [KAIST], Eun-Young Choi, Sang-Eun Bae [KAERI]
13:40~14:00	Stuides on the Chlorination Reaction of SrO and BaO in LiCl-KCl Molten Salt Chang Hwa Lee, Seok-Min Hong, Seung-Woo Paek, Sang Kwon Lee [KAERI]
14:00~14:20	Simulation of Spent Fuel Behavior of PWR for Different Burnups via FRAPCON-4.0 Modification Dahyeon Woo, Youho Lee [Seoul Natl. Univ.]
14:20~14:40	Break Time
14:40~15:00	Characteristics of Multiaxial Stress-induced Hydride Reorientation in Zirconium Alloy Cladding Tubes Dongyeon Kim, Youho Lee [Seoul Natl. Univ.]
15:00~15:20	An Isotopic Analysis of SFCOMPO Radiochemical Assay Data Using TRITON and ORIGEN-S Calculation Results for Evaluating Uncertainties in Burnup Credit Application Kyu Jung Choi, Dong Jin Kim, Chang Ho Shin, Ser Gi Hong [Hanyang Univ.], Kiyoung Kim [KHNP-CRI]
15:20~15:40	Data Analysis of Surrogate Spent Nuclear Fuel Loaded Road Transportation Test Under Normal Conditions of Transport Jae Hoon Lim, Woo-seok Choi, Jongmin Lim, Gil-Eon Jeong, Sang Soon Cho [KAERI]

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제2분과. 사용후핵연료 처분전관리 POSTER

Predisposal Management of Spent Nuclear Fuel

| 심사위원 | 조상순[KAERI], 국동학[KAERI]

◆ 6. 2(수) 09:00 ~ 4(금) 18:00

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2-P-01	Comparison of Hydride Embrittlement of Zircaloy-4 and Zr-Nb Alloy Cladding Tubes Sangbum Kim, Youho Lee [Seoul Natl. Univ.], Joo-Hee Kang [KIMS]
2-P-02	Facilitate Measurement of RHF by Using PROPHET and Its Application Donguk Kim, Dongyeon Kim, Youho Lee [Seoul Natl. Univ.]
2-P-03	Hydrogen Diffusion in Zirconium Alloy During Dry Storage by Simulation and Experiment Chansoo Lee, Youho Lee [Seoul Natl. Univ.]
2-P-04	Vibration Characteristics of KJRR-F Fresh Fuel Under Normal Transportation Test Gil-Eon Jeong, Yun-Young Yang, Kyoung-Sik Bang [KAERI]
2-P-05	Development of PHWR Spent Fuel Transport Basket Kiyong Kim, Donghee Lee, Yongdeog Kim [KHNP-CRI], Dongkyu Lee [KONES Corp.]
2-P-06	Drop Condition and Sensor Position Determination for Performance Test of KTC-360 (High Capacity Cask for CANDU Spent Fuel Bundle) Woo-seok Choi, Yun-young Yang, Jongmin Lim [KAERI], Seonghoon Jung, In-soo Jung [KONES Corp.]
2-P-07	Evaluation of Fuel Depletion Uncertainty in Criticality Analysis of GBC-32 Cask Hyungju Yun, Seunghyun Kim, Hyeonwoo Oh [KORAD], Suji Yoon [KINS]
2-P-08	Review on Application of Spent Nuclear Fuel Dry Storage Canisters Sunghwan Chung, Donghee Lee, Taehyung Na, Taehyeon Kim, Kiyong Kim, Yongdeog Kim [KHNP-CRI]
2-P-09	Handling Analysis for SAFER Under Abnormal Installation Conditions Jae-Jun Lee, Joung-Yeul Lee, Hyeong-Koo Kim, Seong-Ki Lee [KEPCO NF]
2-P-10	Evaluation of Residual Water After Drainage in the Canister Geon-Hui Lee, Kyung-Wook Shin, Gyung-Sun Chae, Do-young Jung, Jae-Seok Park [SAE-AN Eng. Corp.]

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2-P-11	<p>Preparation of Ag-Containing Aluminosilicate Sorbents With Improved Textural Properties</p> <p>Jae-Won Lee, Seok-Min Hong, Ju-Ho Lee, Yung-Zun Cho [KAERI]</p>
2-P-12	<p>Preparation for Surrogate Spent Nuclear Fuel Loaded Sea Transportation Test Under Normal Conditions of Transport</p> <p>JaeHoon Lim, Woo-seok Choi, Jongmin Lim, Gil-Eon Jeong, Sang Soon Cho [KAERI]</p>
2-P-13	<p>Analysis of the Effect of Various Factors on the Spent Nuclear Fuel Transportation Risk Assessment</p> <p>Wooyong Choi, Janghwan Lim [KEPCO NF]</p>
2-P-14	<p>Mechanical Behavior Modeling of Spent Fuel Subjected to Vibration Load Under Land Transportation Condition</p> <p>Donghyo Lee, Hyeongkoo Kim, Seongki Lee [KEPCO NF]</p>
2-P-15	<p>Speculation on the Technical Approaches Based on Advice of Spent Fuel Public Discussion Reexamination Committee</p> <p>Siyoung Oh, Donghyo Lee, Seongki Lee [KEPCO NF]</p>
2-P-16	<p>Design for Radioactive Waste Packages Using Honeycomb Structure as Impact Limiter</p> <p>Y.J. Kim [Orionenc Co., Ltd.]</p>
2-P-17	<p>Pre-treatment Process System for Irradiated Fuel Cladding</p> <p>Sunggeun Kim, Jeongnam Jang, Hyungmoon Kwon [KAERI]</p>
2-P-18	<p>The Evaluation of Exterior Wall Radiation Shielding Performance at the PWR Spent Fuel Dry Storage Facility</p> <p>Donghee Lee, Kiyoung Kim, Yongdeog Kim [KHNP-CRI]</p>
2-P-19	<p>Experimental Evaluation of Heating Effect of Nuclear Fuel on Rod Surface Temperature in Forced Circulation Drying</p> <p>Doyun Kim, Seunghwan Yu [KAERI]</p>
2-P-20	<p>Feasibility Study to Derive Design Power Spectral Density Function for Road Transportation Condition</p> <p>Woo-seok Choi, Jae Hoon Lim, Jongmin Lim, Gileon Jeong [KAERI]</p>
2-P-21	<p>Asymmetry Analysis of Prompt Neutron Angular Distributions for Mixed Composition Nuclear Materials</p> <p>Seonkwang Yoon, Ho-Dong Kim [UST], Chaehun Lee, Young-Su Kim, Byung Hee Won [KAERI], Hee Seo [Jeonbuk Natl. Univ.]</p>

포스터번호표	논문제목 / 저자(소속)
2-P-22	Effect of Structural Stiffness of a Fuel Dummy on a Drop Impact in Drop Tests of Transportation Casks for Spent Nuclear Fuels Jongmin Lim, Sang Soon Cho, Woo-seok Choi [KAERI]
2-P-23	Thermal Evaluation for Simple Model of SF* Dry Storage Module Tae Hyung Na, Tae Hyeon Kim, Dong Hee Lee [KHNP-CRI]
2-P-24	Technical Considerations for Tomographic Verification on Spent Nuclear Fuel Prior to Transfer to Dry Storage Heejun Chung [KINAC]
2-P-25	Electrochemical Modeling of Partitioning of TRU From RE Elements Hyo On Nam [KAERI]
2-P-26	Status and Prospective of New Regulatory Framework for Spent Fuel Storage Cask Suji Yoon [KINS]

제3분과. 고준위폐기물처분 ORAL

High-Level Waste Disposal

| 좌장 | 김건영[KAERI], 석희준[KIGAM], 김진섭[KAERI], 박진용[KINS]

6. 3(목) 09:00 ~ 15:20

3F 혁신실

발표시간	논문제목 / 저자(소속)
09:00~09:20	Long Term Geologic Evolution and Its Implication to the Safety Functions of a Potential High-Level Radioactive Waste Repository Yongsoo Hwang, In-Yung Kim, Jung-Woo Kim [KAERI]
09:20~09:40	Estimation of Evaluation Parameters in Site Assessment for HLW Disposal in Terms of Rock Mechanics Seungbeom Choi, Yoo Hong Kihm, Dae-Sung Cheon [KIGAM]
09:40~10:00	Short-term Evolution of Transmissivity in Fractured Crystalline Rock Aquifer Byeong-Hak Park, Kyung-Woo Park, Changyong Lee, Nak-Youl Ko, Chae-Soon Choi, Sung-Hoon Ji [KAERI]
10:00~10:20	A Discrete Fracture Network (DFN) Model With Conditioning Sung-Hoon Ji [KAERI]
10:20~10:40	Break Time
10:40~11:00	New Analytical Solution of Multi-species Radionuclide Transport in Geological Barrier With Arbitrary Heterogeneous Aquifer Heejun Suk, Seung Hyo Son, You Hong Kihm [KIGAM], Jui-sheng Chen [Natl. Cent. Univ.]
11:00~11:20	Rock Stress Estimation of Natural Barrier in Underground Disposal Research Facility: Establishing a Rock Mechanical Site-descriptive Model Chae-Soon Choi, Sung-Hoon Ji, Jai-Yong Park, Byeong-Hak Park, Nak-Youl Ko, Kyung-Woo Park [KAERI]
11:20~11:40	Machine-Learning-based Prediction Model of the Damage in KURT Granite Considering Various Acoustic Emission Parameters in Laboratory Scale Hang-Lo Lee, Jin-Seop Kim, Chang-Ho Hong, Dong-Keun Cho [KAERI]
11:40~12:00	Review of Instant Release Fractions of CANDU and PWR Spent Nuclear Fuels for a Safety Case Heui-Joo Choi, In Young Kim, Youn-Myoung Lee, Dong-Keun Cho [KAERI]
12:00~13:00	Break Time

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High-Level Waste Disposal

| 심사위원 | 이재완[KAERI], 이정환[KORAD]

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포스터번호표	논문제목 / 저자(소속)
3-P-01	Limitation and Relevance of Natural Analogue Studies for Radionuclide Behaviors in HLW Disposal Min-Hoon Baik, Ji-Hun Ryu [KAERI]
3-P-02	Optimization of Spent Fuel Assemblies per Canister Based on Decay Heat for the Optimum Design of a Deep Geological Repository Jongtae Jeong, Jung-Woo Kim, Dong-Keun Cho [KAERI]
3-P-03	Evaluation of Thermal Properties for the Gap-Filling Material Seok Yoon, Ji-Won Kim [KAERI], Min-Jun Kim [KIGAM]
3-P-04	Lessons Learned From Posiva's Safety Case Report on Canister Materials Stability Tae-Jin Park, Ji-Hun Ryu, Min-Hoon Baik, Hun Suk Im [KAERI]
3-P-05	First Step of Buffer Durability Study in Natural Analogue for Waste Disposal Hun Suk Im, Tae-Jin Park, Min-Hoon Baik, Ji-Hun Ryu [KAERI]
3-P-06	Development of Numerical Model for Sulfide-induced Corrosion of Copper via MOOSE Nakkyu Chae, Samuel Park, Sungyeol Choi [KAIST]
3-P-07	Scenario Analysis for Thermo-Hydraulic Behavior in Deep Geological Repository Samuel Park, Nakkyu Chae, Sungyeol Choi [KAIST]
3-P-08	Continuous Production of SiO ₂ -Al ₂ O ₃ -P ₂ O ₅ by Using Aerosol Process System to Dechlorinate and Vitrify Radioactive Salt Waste From Pyroprocessing Seong-sik Shin, Ga-yeong Kim, Byeonggwon Lee, Hyeon Jin Eom, Hyun Woo Kang, Ki Rak Lee, Jung-Hoon Choi, Hwan-Seo Park [KAERI]

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3-P-09	<div>Current Status of the IAEA URF Network and the Results of the 19th Annual Meeting</div> <div>Geon Young Kim, Jin-Seop Kim [KAERI]</div>
3-P-10	<div>Case Study on Long-Term Evolution of the Surface Environment by Climate Change for Deep Geological Disposal of Radioactive Wastes</div> <div>Nak-Youl Ko, Kyung-Woo Park [KAERI]</div>
3-P-11	<div>Preliminary Study of Cesium Behavior Within Rock Fragment Under Deep Geological Condition</div> <div>Bong-Ju Kim, Ja-Young Goo, Yong-Kwon Koh, Jang-Soon Kwon [KAERI]</div>
3-P-12	<div>Numerical Approach for COMSOL Multiphysics Simulation in APro</div> <div>Hong Jang, Jung-Woo Kim [KAERI]</div>
3-P-13	<div>Basic Research on Methods of Rock Simplification and Classification Applied to Disposal Study: a Case Study in Finland</div> <div>Ji-Min Choi, Soolim Jung, Jai-Yong Park [KAERI]</div>
3-P-14	<div>Analysis on the Current Status of Domestic and Foreign Radionuclide Sorption Databases for the Safety Assessment of Spent Nuclear Fuel Disposal</div> <div>Jae-Kwang Lee, Jang-Soon Kwon [KAERI]</div>
3-P-15	<div>Improvement of Three-Dimensional Geologic Modeling of the KURT Site for Analyzing Long-Term Evolution of the Natural Barrier</div> <div>Jai-Yong Park, Soolim Jung, Ji-Min Choi [KAERI]</div>
3-P-16	<div>TBM Excavation Method for High-level Radioactive Waste Repository</div> <div>Gi-Jun Lee, Seok Yoon [KAERI]</div>
3-P-17	<div>Influence of Bentonite Alteration on Radionuclide Sorption</div> <div>Seung Yeop Lee, Hyo Jin Seo, Jang Soon Kwon [KAERI]</div>
3-P-18	<div>Reviews of the Study on the Alternative Options for High Level Radioactive Waste Management</div> <div>Jong-Youl Lee, Heui-Joo Choi, Dong-Keun Cho [KAERI]</div>
3-P-19	<div>The Role of Natural Analogue in Spent Fuel Disposal Research</div> <div>Ji-Hun Ryu, Hun Suk Im, Tae-Jin Park, Min-Hoon Baik [KAERI]</div>

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포스터번호표	논문제목 / 저자(소속)
3-P-20	Quantitative Analysis of the Hydrogeological Change of Rock Mass in the Vicinity of Borehole Surface Kyung-Woo Park, Byeong-Hak Park, Nak-Youl Ko, Sung-Hoon Ji [KAERI]
3-P-21	Review of Degradation of the Spent Nuclear Fuel Matrix for a Safety Assessment Heejae Ju, Jung-Woo Kim, Dong-Keun Cho [KAERI]
3-P-22	Modelling Radionuclide Transport Through Biosphere Using Modified SWAT Minjeong Kim, Jung-Woo Kim, Jaewon Lee, Dong-Keun Cho [KAERI]
3-P-23	Correlation Analysis of Hydraulic Conductivity and Geophysical Characteristics Changyong Lee, Sung-Wook Jeon [Jeonbuk Natl. Univ.], Byeong-Hak Park, Kyung-Woo Park, Chae-Soon Choi, Sung-Hoon Ji [KAERI].
3-P-24	Recent Technologies in the Concept, Manufacturing, and Installation of Backfill for Disposal Tunnel Jae Owan Lee, Seok Yoon, Jin-Seop Kim [KAERI]
3-P-25	Development of a Web Application for 3D Underwater Scan Calibration in Nuclear Decommissioning Hyoseok Lim [Koreatech Univ.], Sungmoon Joo, Jonghwan Lee [KAERI]
3-P-26	Preliminary Study on the Lithological Characteristics of Jurassic Granitoids for Construction of Geological Evolution History Around KURT Site Soolim Jung, Ji-Min Choi, Jai-Yong Park [KAERI]
3-P-27	Benchmark Simulation of Radionuclide Transport in a Fractured Rock Using Explicit and Implicit Fracture Models Jaewon Lee, Jung-Woo Kim, Minjeong Kim, Dong-Keun Cho [KAERI]

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제4분과. 중·저준위폐기물관리 ORAL

Low and Intermediate Level Radioactive Waste Management

| 좌장 | 최성열[KAIST], 홍대석[KAERI]

◆ 6.4(금) 09:00 ~ 12:00

◆ 3F 혁신실

발표시간	논문제목 / 저자(소속)
09:00~09:20	<p>Preliminary Safety Assessment of VLLW Disposal in the Well Scenario Using RESRAD-OFFSITE</p> <p>Wontak Lee, Joowan Park, Soonyoung Kim [RADCORE, Co., Ltd]</p>
09:20~09:40	<p>A Study on the Technology to Secure Disposal Safety by Sintering of Pellets Compressed With Dried Powder of Concentrated Liquid Radioactive Waste in NPPs</p> <p>Yu-Sun Yeom, Doo Hee Lee, Jung Gi Kang, Yoon Hweoi Huh, Seong-geon Kim, Seung U Jeong [LC Gen Co., Ltd.]</p>
09:40~10:00	<p>Chemical Affinity Quantum Sieving Effect of Fluorine for Isotopic Separation of Tritium From Radioactive Wastewater</p> <p>Hyojoo Kim, Bhupendra Kumar Singh, Wooyong Um [POSTECH]</p>
10:00~10:20	<p>Development of the Pyrolysis for Volume Reduction of Organic Solid Waste Containing Uranium</p> <p>Jeong-myeong Kim, Yeong-jong Ju, Nam-chan Cho, Jung-suk Park, Jung-hwan Hong, Byeong-gyo Jeong [KEPCO NF]</p>
10:20~10:40	<p>Break Time</p>
10:40~11:00	<p>Development of Calculation Program for Density Correction Efficiency of Gamma Spectroscopy</p> <p>Hyun Suk Baek, Hyun Chul Jeong, Sang Mo Ham, Sung Yup Jeong [Godo Tech Co., Ltd]</p>
11:00~11:20	<p>Evaluation of Stacking Deformation Inside Disposal Facility According to the Void-filling Rate of the NPP Decommissioning Radioactive Waste Disposal Container</p> <p>Hyungoo Kang, Taeman Kim, Chunhyung Cho [KORAD], Younjun Kim [Orionenc Co., Ltd.]</p>
11:20~11:40	<p>A Preliminary Study on Feasibility of Identification of Gamma Emitting Radionuclides Using Mass Attenuation Coefficient of Shielding Materials</p> <p>Hyun Seok Song, Se Geun Lee, Jae Hak Cheong [Kyung Hee Univ.]</p>
11:40~12:00	<p>Study on the Basic Properties of Sintering for Treatment of Uranium Contaminated Soil</p> <p>Jaewoong Hwang, Jaseung Koo [Chungnam Natl. Univ.], Keunyoung Lee [KAERI]</p>

제4분과. 중·저준위폐기물관리 POSTER

Low and Intermediate Level Radioactive Waste Management

| 심사위원 | 황영환[KHNP-CRI], 김석훈[FNC]

◆ 6. 2(수) 09:00 ~ 4(금) 18:00

◆ E-Conference(www.krs.or.kr)

포스터번호표	논문제목 / 저자(소속)
4-P-01	<p>Compressive Strength Analysis of Polymer-Cement Along With Their Mixing Ratio as a Solidifying Agent for Radioactive Waste</p> <p>Seong Ho Yoo, Hyun Ki Jung, Ho Yeon Yang [Korea Environ. Test. Anal. Lab.], Dong Hoon Oh, Kyoung hwan Joung [Jung Seok Chem. Corp.]</p>
4-P-02	<p>A Study on the Manufacturing of Polymer Waste Form Incorporated Pellets Using the Polymer Solidification System</p> <p>Sang-Hyun Lim, Jun-yeol An, Jong-Soon Song, Ki-Hong Kim [Radin. Inc.]</p>
4-P-03	<p>Development of High Efficient Compactor for High Dose Spent Filter</p> <p>K.H. Park, K.H. Lee, U.J. Lee, S.W. Chung [Orionenc Co., Ltd.]</p>
4-P-04	<p>Performance Evaluation of the Daily Waste Throughput of a Radioactivity Measurement System for Standard/Non-standard Radioactive Waste</p> <p>Wook Jae Yoo, Jung Min Oh, Sung Ryul Kim, Hye Jin Kim, Kyu Tae Park [ORBITECH], Sang Mook Kang [KARA]</p>
4-P-05	<p>A Case of Clearance for Surface Contaminated Waste in Radioactive Material Use Facility</p> <p>MalGoBalGaeBitNaLa Yoo, SuJin Kim, YunJeong Hong, SungHee Jung [KAERI]</p>
4-P-06	<p>Evaluation of Radiation Dose Exposure to Driver When Transporting Radioactive Materials Using RESRAD</p> <p>Sangbok Lee [Gachon Univ.], Jeongsoo Park, Seokhwan Lee, Kwanggyun Choi, Seunggeon An [Sunkwang T&S]</p>
4-P-07	<p>Identification Gamma Radionuclide Using Light-output Ratio of Inorganic and Organic Scintillators</p> <p>Seunghyeon Kim, Siwon Song, Taeseob Lim, Jae Hyung Park, Jinhong Kim, Jin Ho Kim, Bongsoo Lee [Chung-Ang Univ.]</p>
4-P-08	<p>A Study on the Design of a Mobile Compression Facility for Decommissioning Wastes of Nuclear Power Plants That Can be Used for Dual Purposes</p> <p>Hyung Gyu Lee, Hyeonjun Jeong, Unjang Lee, Junghue Byun, Kyungho Lee, Sewon Chung [Orionenc Co., Ltd.]</p>

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포스터번호표	논문제목 / 저자(소속)
4-P-09	Operating Characteristics of Remote Lid Fastening Device for High Integrity Container Ji-Hoon Lee, Mi-Hyun Lee, Young Hwan Hwang, Jisoo Yoon, Narae Lee [KHNP-CRI], Moonoh Kim [KONES Corp.]
4-P-10	A Hybrid Modeling Approach to Evaluate Exposure Dose Rate at the LILW Disposal Site in Korea Jiseon Jang, Myunggoo Kang, Tae-man Kim, Chun-hyung Cho [KORAD]
4-P-11	A Disposal System of Liquid Waste Generated in Separate Buildings of NPPs Hyung Kwon Jeong, Dong Kyu Jang, Jeong Won Park [Actrmt]
4-P-12	The Perspectives of the Radioactive Waste Data for Data Science and Predictive Modeling Kwangyoung Sohn, Changhwan Cho, Sungjong Kim [MIRAE-EN]
4-P-13	A Study on Induction Melting for Metallic Radioactive Waste in Decommissioning of NPPs Seongmin Jo, Taewoong Lee, Sunkyu Park, Nakjeom Kim [KEPCO KPS]
4-P-14	A Study on Gas Generation of Radioactive Wastes in High Integrity Container Mi-Hyun Lee, Young Hwan Hwang, Ji-Hoon Lee, Hang-Rae Cho [KHNP-CRI], Moonoh Kim [KONES Corp.]
4-P-15	Suggestion on Selection of AI and Optimization Techniques for Deriving the Optimum Emplacement Scheme of the LILW Complex Disposal Facility Byeong-hyeok Ha, Tongkyu Park, Sukhoon Kim, Hyejin Kim [FNC]
4-P-16	Review on Thermal Treatment Technologies for Liquid Wastes Generated From Multi Nuclide Removal Facility Cheon-Woo Kim, Hyejin Jung, Mi-Hyun Lee [KHNP-CRI]
4-P-17	Analysis of the Elements to Build an Archive Hub System for Radiochemical Analysis of Radwaste Samples Hyun Jin Lee, So Jung Shim, Kyung Ho Kim, Seung Su Shin, Chang Heon Lee, Young-Ku Choi [NDRI]
4-P-18	Design of Plasma Arc Melting—Molten Salt Oxidation Process for the Treatment of Hazardous Radioactive Wastes Jae-Hyuk Choi, Jong-Sung Park, Na-young Kim, In-sun Jang, Kung-Hwa Yang [Dawonsys]
4-P-19	A Preliminary Development of Arc Melting Off—gas Treatment System With Molten Salt Oxidation Jongsung Park, Jae-Hyuk Choi, In-Sun Jang, Na-Young Kim, Kung-Hwa Yang [Dawonsys]
4-P-20	Mechanical Safety of Very—Low—Level—Waste Transport & Storage Containers Woo Nyun Choi, Seung Hun Shin, Seungbin Yoon, Hee Reyoung Kim [UNIST], Unjang Lee [Orionenc Co., Ltd.]

포스터번호표	논문제목 / 저자(소속)
4-P-21	Derivation of Pyrolysis Operating Conditions for Volume Reduction of Radiation Waste Changhwan Cho, Sungjong Kim [MIRAE-EN], Changhyun Ryu, Chulhyun Hwang, Jungsuk Park [KEPCO NF]
4-P-22	Development of 100kW Plasma Torch Melting System for Radioactive Waste Sunghoon Hong, Jeongsu Jeong, Seoyong Choi [KHNP-CRI], Seoung Hun Yang [KHNP]
4-P-23	Development of Discharging Nozzle for Cold Crucible Induction Melter Sunghoon Hong, Jeongsu Jeong, Seoyong Choi, Seok-Ju Hwang [KHNP-CRI]
4-P-24	Evaluation of Applicability for Metal Waste Using MW Class Plasma Torch Melting System Sunghoon Hong, Jeongsu Jeong, Seoyong Choi [KHNP-CRI], Jun-Seok Nam [KHNP]
4-P-25	Review on Glass Melt Discharge Technologies Applied to Vitrification Technology Cheon-Woo Kim, Seok-Ju Hwang, Sunghoon Hong [KHNP-CRI]
4-P-26	Case Study for Establishing Strategy of Predisposal Management of Radioactive Waste Using System Dynamics Jae Min Lee, Jae Hak Cheong [Kyung Hee Univ.]
4-P-27	Evaluation of the Decontamination Efficiency of Radioactive Wastes Generated During the Production of ²⁰¹Tl Jae-seung Heo, Jung-min Kim [Korea University], Sang-rok Kim, Gi-sub Kim [KIRAMS]
4-P-28	Development of Mixed-waste Melting Furnace System Seoyong Choi, Sunghoon Hong, Jeongsu Jeong [KHNP-CRI], Jun-Seok Nam [KHNP]
4-P-29	Development of the Dam-type Discharge Device for Plasma Torch Melting System Seoyong Choi, Sunghoon Hong, Jeongsu Jeong [KHNP-CRI], Jun-Seok Nam [KHNP]
4-P-30	Development of Multipurpose Plasma Melting System Byung-Soo Yoo [VITZRONEXTECH]
4-P-31	Development of the Rod-type Discharge System for Vitrification Facility Seoyong Choi, Sunghoon Hong, Jeongsu Jeong [KHNP-CRI], Jun-Seok Nam [KHNP]
4-P-32	Evaluation of Equivalent Drop Height for Radioactive Wasting Packaging Containers Using DIC Method Yun-Young Yang, Jongmin Lim, Ju-Chan Lee [KAERI]
4-P-33	Development of Sampling Device for Radwaste Characterization Specimen Yoondo Oh, Donghan Yoo, Daeseok Hong, Hyun-kyu Lee [KAERI]

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포스터번호표	논문제목 / 저자(소속)
4-P-34	Review on International Radwaste Acceptance Criteria for Thermal Treatment Technology Seokju Hwang, Hang-Rae Cho, Siyoung Kim, Young Hwan Hwang [KHNP-CRI]
4-P-35	Development of Integrated Decontamination Process With Remote Control Technology Applied Byeong-Ho Kim, Kyu-Ho Lee, Hyeon-Oh Park, Ki-Hyun Kwon, Seung-Geon An [Sunkwang T&S]
4-P-36	Development of Treatment Process for Liquid Waste of Complex-fluid Decontamination Technology Containing Nanoparticles Su-Jeong Cho, Ha-Young Oh, Bong-Ki Ko, Hyeon-Oh Park, Seung-Geon An [Sunkwang T&S]
4-P-37	Development of Remote-Control Robot Technology for High Level Radioactive Spent Filters Ji-Soo Yoon, Ji-Hoon Lee [KHNP-CRI], Hang-Rae Cho [KHNP]
4-P-38	Evaporation and Thermal Decomposition of Paraffin From Paraffin Wasteform Including Radioactive Boric Acid Waste Ji-Soo Yoon, Young Hwan Hwang, Mi-Hyun Lee [KHNP-CRI]
4-P-39	Development of the Glass Wool Radioactive Waste Treatment Technology Ji-Soo Yoon, Young Hwan Hwang, Mi-Hyun Lee [KHNP-CRI]
4-P-40	Simulation for Predicting the Optimal Conditions of Radionuclide Barrier Function of High Integrity Containers in Disposal Environment Hang-Rae Cho, Jun-Gi Yeom, Sun-Gab Park [KHNP], Mi-Hyun Lee, Ji-Soo Yoon [KHNP-CRI]
4-P-41	Development of Technology for Treatment of Non-degradable Radioactive Waste Jeongsu Jeong, Seoyoung Choi, Mihyun Lee, Junseok Nam, Deukman Kim [KHNP-CRI]
4-P-42	Development of Small Capacity 100kW Torch Technology Jeongsu Jeong, Sunghoon Hong, Seoyoung Choi, Junseok Nam, Deukman Kim [KHNP-CRI]
4-P-43	Hybrid Discharge Device for Vitrification Facility Jeongsu Jeong, Sunghoon Hong, Seoyoung Choi, Junseok Nam, Deukman Kim [KHNP-CRI]
4-P-44	Evaluation of the Gas Generation From Disposed Spent Resin in PC-HIC Hyun Woo Song, Suk Nam Lim, Moonoh Kim, Nakhoon Sung [KONES Corp.], Na Rae Lee, Younghwan Hwang [KHNP-CRI]
4-P-45	Preliminary Studies on Evaluation Techniques of Neutron Activation in the PET Cyclotron for Proper Planning the Decommissioning Using Monte Carlo Code Se Geun Lee, Jae Hak Cheong [Kyung Hee Univ.]

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포스터번호표	논문제목 / 저자(소속)
4-P-46	A Study on Application of High Integrity Container for Boron Concentrates Young Hwan Hwang, Mi-Hyun Lee, Ji-Soo Yoon, Hang-Rae Cho, Joon-Seok Nam, Narae Lee, Ji-Hoon Lee [KHNP-CRI], Moonoh Kim [KONES Corp.]
4-P-47	Establishment of Optimal Quantitative Conditions for Chelate Analysis of Radioactive DAW Samples Using HPLC Myeong Shin Hwang, Heung Nae Lee [DOLRAS], Mi-Rang Lee [NPP/KHNP]
4-P-48	Kd Measurement for Tc(VII) in TEVA Resin and Anion Exchange Resin According to the Time of Addition of the Carriers During the Sequential Separation of ⁹⁹Tc-⁹⁰Sr-⁵⁵Fe-⁶³Ni in Rad-Waste Myeong Shin Hwang, Heung Nae Lee [DOLRAS]
4-P-49	Recovery Determination of Fe-55 Separation/analysis in Rad-waste Using Fe-59 as Tracer Myeong Shin Hwang, Heung Nae Lee [DOLRAS]
4-P-50	Review of the Possibility of Disposing of High Activity Spent Resins Using Concentration Average Method Moonoh Kim [KONES Corp], Mi-Hyun Lee, Young-Hwan Hwang, Ji-Hoon Lee [KHNP-CRI]
4-P-51	Evaluation of Radiation Shielding Performance for Uranium Material Storage Container Using Microshield Jeongwook Moon, Jongjin Kim [KAERI]
4-P-52	Determination of the Density Correction Factor for Samples Analysis of Clearance Wastes in Gamma Spectroscopy Sang Mo Ham, Hyun Chul Jeong, Hyun Suk Baek, Sung Yeop Jeong [Godo Tech]
4-P-53	Application of RESRAD-OFFSITE to IAEA Vault Test Case for Radwaste Disposal Safety Assessment Dong Ki Kim, Joo Wan Park, SoonYoung Kim [RADCORE]
4-P-54	Evaluation of Radioactive Waste Characteristics in PC-HIC Na Rae Lee, Ji Hoon Lee, Mi Hyun Lee, Young Hwan Hwang, Jisoo Yoon [KHNP-CRI]
4-P-55	Zeolite-Kapok Membrane for Cesium Adsorption and High Volume-Reduction of Radioactive Liquid Wastes Eun Ae Park, Seung-Yop Lee [Sogang Univ.], Jun Sik Son [Korea Text. Dev. Inst.]
4-P-56	Reinforce on Leaching Resistance of Solidified Cement by Hot Isostatic Press Ki Joon Kang, Sia Hwang, Hee Reyoung Kim [UNIST]

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제5분과. 제염해체 ORAL

Decommissioning and Environmental Remediation

| 좌장 | 박광수[Doosan HIC], 강현우[KAERI], 김종윤[KAERI], 김유수[KEPCO E&C]

◆ 6. 3(목) 09:00 ~ 16:00

◆ 3F 인재실

발표시간	논문제목 / 저자(소속)
09:00~09:20	In-Situ Sr-90 Analysis in Soil From Selective Gating of Energy Channels on PVT Probe Chanki Lee, Hee Reyoung Kim [UNIST]
09:20~09:40	Chemical Stability Study for SAP(SiO ₂ -Al ₂ O ₃ -P ₂ O ₅) Wasteform in Domestic Underground Water Hyeon Jin Eom, Ki Rak Lee, Ga yeong Kim, Hwan-Seo Park [KAERI], Kyuchul Shin [Kyungpook Natl. Univ.]
09:40~10:00	Choline Chloride-Based Deep Eutectic Solvents as an Alternative Decontamination Agent for Radioactive Metal Waste Nayoung Kim, Wonseok Yang, James Amphlett, Sungyeol Choi [KAIST]
10:00~10:20	Assessment of Impact on the Statistical Test of MARSSIM due to the Residual Contamination Distributions of Survey Units Using Random Sampling Method Ga Hyun Chun, Jae Hak Cheong [Kyung Hee Univ.]
10:20~10:40	Break Time
10:40~11:00	Decontamination Performance Test by Using a Laser for Radioactive Contaminants of Various Materials and Shapes Byeong-Mok Park, Cheol-Wan Park, Ah-Ran Cha, Tae-yang Noh [SAE-AN ENERTECH]
11:00~11:20	Behaviors of Metals in a Chelate-free Inorganic Chemical Decontamination Process Naon Chang, Yongsoo Kim [Hanyang Univ.], Heechul Eun, Seonbyeong Kim [KAERI]
11:20~11:40	Investigation of Radioactive Waste Level of Channel Structures in Decommissioning Wolseong Unit 1 Gilyong Cha, Minhye Lee, Soonyoung Kim [RADCORE], Hyunmin Kim, Minchul Kim [KHNP-CRI]
11:40~12:00	Verification Test of the Kori Unit 1 Dismantling Technologies Using the Mockup Haewoong Kim, Kwangsoo Park, Kyuho Chang, Changkyu Kim [Doosan HIC]

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발표시간	논문제목 / 저자(소속)
12:00~13:00	Break Time
13:00~13:20	Development of Tritium (³ H, T) Removal Technology From Liquid Radioactive Waste Containing Tritiated Water (HTO) Jeong Hee Lee, YongMin Park, Gi Beom Park, Seung-il Kim, Duk-won Kang [Elim-Global]
13:20~13:40	Design of the Chamber for Mechanical Decontamination of the Waste Electric Lines by Process of Nuclear Power Plant Decommissioning Chunsik Lee, Sung-Su Cho [IAE]
13:40~14:00	Sequential Treatment Process for the Volume Reduction of Radioactive Concrete Waste From Decommissioning Projects Maengkyo Oh, Keunyoung Lee, Richard I. Foster [KAERI], Chang-Ha Lee [Yonsei Univ.]
14:00~14:20	Development of Heterostructure P-doped Co ₉ S ₈ @MoS ₂ for Efficient Tri-butyl Phosphate Degradation Junsung Jeon, Wooyong Um [POSTECH]
14:20~14:40	Break Time
14:40~15:00	Indirect Radionuclide Inventory Assessment for Decommissioning Radioactive Wastes: Current Status and Future Prospect of Scaling Factor Method Tae-Hyeong Kim, Junghwan Park, Jeongmook Lee, Junhyuck Kim, Jong-Yun Kim, Sang Ho Lim [KAERI]
15:00~15:20	Calcium-based Solution as Washing Agent for the Removal of Strontium in a Soil Near Nuclear Power Plant Hojae Song, Kyoungphile Nam [Seoul Natl. Univ.]
15:20~15:40	Decontamination Process Optimization for CANDU Zirconium Alloy Waste Jungho Hur, Seungmin Ohk, Younghwan Jeon, Jaeyeong Park [UNIST]
15:40~16:00	Derived Improvements From the Experience in Development of NPP Decommissioning Waste Packaging and Transportation Containers Moonoh Kim, Nakhoon Sung [KONES Corp.], Mi-Hyun Lee, Dae-Sub Choi, Ji-Hoon Lee [KHNP-CRI]

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Decommissioning and Environmental Remediation

| 심사위원 | 김문오[KONES], 이기락[KAERI]

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5-P-01	Dead Leg Investigation in Full System Decontamination JeongJu Kim, Cho-Rong Kim, Hak-Soo Kim [KHNP-CRI], Jong-Hoa Kim [SAE-AN ENERTECH]
5-P-02	Decontamination of Sr Contaminated Concrete Waste via Chlorination Technique Min Ku Jeon, Sung-Wook Kim, Keun-Young Lee, Maeng-Kyo Oh [KAERI]
5-P-03	Assessment and Analysis on Radiation Exposure Dose in Operators During a Decontamination Process of Pressurizer of Pressurized Heavy Water Reactor H. Y. Lee, S. I. Kim, G. T. Yang, J. S. Song [Chosun Univ.]
5-P-04	Improved Underwater Laser Cutting for Dismantling Nuclear Facilities Jae Sung Shin, Seong Y. Oh, Seung-Kyu Park, Taek-Soo Kim, Hyunmin Park, Jonghwan Lee [KAERI]
5-P-05	Considerations in View of Safety Regulation for Melting Processing Technology of Radioactive Metal Waste During Decommissioning of a Nuclear Facility Kwan Seong Jeong, Chang Hyun Roh, In Ho Yoon [KAERI], Jung Jun Lee [KINS]
5-P-06	A Study on Estimation of Radiation Exposure Dose During Dismantling of RCS Piping in Decommissioning Nuclear Power Plant Taewoong Lee, Seongmin Jo, Sunkyu Park, Nakjeom Kim, Kichul Kim, Seongjun Park [KEPCO KPS]
5-P-07	A Study on Performance Comparison of In-situ γ -ray Detectors for Discrimination of γ -ray Peaks Induced by Neutron Activation in Decommissioning of NPP: Monte Carlo Simulation Study Taewoong Lee, Seongmin Jo, Sunkyu Park, Nakjeom Kim, Kichul Kim, Seongjun Park [KEPCO KPS]
5-P-08	Monitoring the Distribution of γ -rays for Region of Hot-spot in Decommissioning of NPP Using Cubic Compton Camera: Monte Carlo Simulation Study Taewoong Lee, Seongmin Jo, Sunkyu Park, Nakjeom Kim, Kichul Kim, Seongjun Park [KEPCO KPS]

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포스터번호표	논문제목 / 저자(소속)
5-P-09	Study on Solidification of a CO₂ Mineralization Product Containing C-14 by Low Temperature Sintering Hee-Chul Eun, Hee-Chul Yang, Hyung-Ju Kim, Keun-Young Lee, Bum-Kyoung Seo [KAERI] Sung-Jun Kim [Korea Univ.]
5-P-10	A Basic Study on Immobilization of a Secondary Waste From a Chemical Decontamination (SP-HyBRID) Hee-Chul Eun, Seon-Byeong Kim , Bum-Kyoung Seo [KAERI], Na-On Chang [Hanyang Univ.]
5-P-11	The Surface Modification and Characterization of SiO₂ Nanoparticles for Higher Foam Stability Mansoo Choi, Bum-Kyoung Seo [KAERI]
5-P-12	A Study on the Control of Boric Acid (Boron) in Discharge Water of Nuclear Power Plant Won Chul Jung [KHNP], Hee Kwon Ku, Jong Chan Lee [FNC], Jong Soon Song [Chosun Univ.]
5-P-13	Characteristics of Waste Generated From Decontamination of Small and Medium-sized Metal Parts in NPP Decommissioning Byoung Gue Jung, Soo Bin Choi, Kwang Nam Kim, Ho Yeon Yang [Korea Environ. Test. Anal. Lab.]
5-P-14	A Case Study of Plant Zoning Experience for the Decommissioning of Nuclear Power Plants Jihwan Yu, Hyung-woo Seo, Sang-hyen Lee, Gi-lim Kim [KHNP-CRI]
5-P-15	Decontamination Method of Synthetic Tritium Solution Using Microalgae Tae Young Kim, Kyung Ho Lee, Se Won Chung, Un Jang Lee [Orionenc Co., Ltd.]
5-P-16	Purification Test of Sr Nuclide From Salt Waste Generated From Pyrochemical Process Byeonggwon Lee, Jung-Hoon Choi, Ki Rak Lee, Hyun Woo Kang, Hyeon Jin Eom, Hwan-Seo Park [KAERI]
5-P-17	B₄C Synthesis for Upcycling and Disposal of Radioactive Boric Acid Waste Ki Rak Lee, Hyeun-Jin Eom, Hwan-Seo Park [KAERI]
5-P-18	Gas Hydrate-based Decontamination of Radioactive Liquid Waste Myung-sub Roh [Daekeong Engineering Co., Ltd], Ju-dong Lee [KITECH]
5-P-19	Tritiated Waste Treatment Technology Development Taeun Kim [Chungnam Natl. Univ], Chan Woo Park, Youngho Sihm, In-Ho Yoon, Hee-Suk Kang [KAERI]

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포스터번호표	논문제목 / 저자(소속)
5-P-20	A Review on Requirements for Radiactive Waste Management During Decommissioning of Nuclear Facilities Hyung-woo Seo, Sang hyun Lee, Ji-hwan Yu, Gi-lim Kim [KHNP-CRI]
5-P-21	All-in-one Radioactivity Measurement and Decontamination System With Secured Reliability Ah-Ran Cha, Byeong-Mok Park, Cheol-Wan Park, Sang-Hwan Jun [SAE-AN ENERTECH]
5-P-22	Sensitivity Analysis of Groundwater Characteristics for Nuclear Power Plant Offsite After Decommissioning Se Jong Lee, Hyeok Jae Kim, Jong Hyeok Park, Jae Bin Heo, Kwang Pyo Kim [Kyung Hee Univ.]
5-P-23	Sensitivity Assessment of Exposure Dose for Geographic Information of Offsite After Decommissioning of Nuclear Facility Min Seong Kim, Hyeung Woo Nam, Byung Min Lee, Jae Bin Heo, Kwang Pyo Kim [Kyung Hee Univ.]
5-P-24	Review of Foreign Cases for Dismantling of Nuclear Facilities Gang Woo Ryu, Se Jong Lee, Hyeok Jae Kim, Hyeung Woo Nam, Kwang Pyo Kim [Kyung Hee Univ.]
5-P-25	Preparation for the Development of the Configuration Management System in a Small Modular Reactor Kook-Nam Park, Wonho Kim, Yongse Kwon [KAERI], Hyejin Yu, Sung-Kyu Lee [Digital Business Vision Co.]
5-P-26	Development of a New Method for Removing Si in Radioactive Concrete and Soil Wastes Seungcheon Lee, Kyungwon Suh, Sang-Eun Bae, Jai Il Park [KAERI]
5-P-27	Analysis on Major Cutting Techniques of Metal Waste Generated From the Decommissioning Process of Pressurized Heavy Water Reactor and Cutting Velocity Sang Heon Lee, Min Ho Lee, Jong Soon Song [Chosun Univ.]
5-P-28	A New Silicon Drift x-ray Detector Based ⁵⁵Fe and ⁵⁹Ni Spectrometer Jinhyung Lee, Hyuncheol Kim, Chang-Jong Kim, Jiyoung Park, Jong-Myoung Lim, Sang Bum Hong [KAERI]
5-P-29	Decommissionig Radioactive Waste Classification System in Domestic and International Mi-Hyun Lee, Young Hwan Hwang, Ji-Hoon Lee, Hang-Rae Cho, Jun-Seok Nam [KHNP-CRI]
5-P-30	Permanent Stationary Nuclear Power Plant Transitional Radiological Characteristics Evaluation Element Analysis to Ensure Sample Representativeness So Jung Shim, Seung Su Shin, Hyun Jin Lee, Kyung Ho Kim, Young-Ku Choi [NDRI]

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포스터번호표	논문제목 / 저자(소속)
5-P-31	Review of Methodology and Cases of Radiological Impact Assessment for Transportation of Radioactive Waste of NPP Wooyoung Kim, Hyun-Woo Song, Moonoh Kim, Nakhoon Sung [KONES Corp.]
5-P-32	Hot Isostatic Press Analysis for Cement Solidification of Sludge Wastes From Decommissioning of the Nuclear Power Plant Sia Hwang, Hee Reyoung Kim [UNIST]
5-P-33	Application of Hydrophobic Silica Nanoparticles for the Selective Separation of Fine Particles From Cesium-Contaminated Soil Sung-Man Kim, Hye-Nim Kim, June-Hyun Kim, Chan-Woo Park, Il-Gook Kim, In-Ho Yoon [KAERI]
5-P-34	Uranium Leaching Characteristics From Soil Under Acidic/alkaline Conditions Seeun Chang, Hyun-Kyu Lee, Han-Byeol Kang, Seong-Bin Park [KAERI]
5-P-35	Review on I-129 Scaling Factor on Low-Level Waste Junghwan Park, Tae-Hyeong Kim, Jeongmook Lee, Junhyuck Kim, Jong-Yun Kim, Sang Ho Lim [KAERI]
5-P-36	Overview of Data Quality Objective in Characterization Survey Jong Hyun Kim [KINS]
5-P-37	Overview of Procedure to Release the Survey Unit in MARSSIM Jong Hyun Kim [KINS]
5-P-38	Preliminary Study of the Optimal Scale Up Factor for the Pilot Scale Chemical Decontamination Liquid Waste Decomposition System Sung-Hyun Lee, Jung-Hyun Lee, Ju-Hyeon Park, Hye-Min Cho, Ki-Chul Kim [KEPCO KPS]
5-P-39	Preliminary Studies of Conditional Clearance of Concrete Waste in Radioactive Waste Repository Using AMBER Software In Gyu Chang, Jae Hak Cheong [Kyung Hee Univ.]
5-P-40	Big Data Analysis With R-studio for Radioactive Waste's Concentration Behavior According to Data Components Hyuk Han, Seung Uk Yoo, Keon Il Cha, Saed Alrawash, Muath Musbah, Chang Je Park [Sejong Univ.]
5-P-41	Sensitivity Study of Cobalt Self-Powered Neutron Detector Seung Uk Yoo, Hyuk Han, Saed Alrawash, Muath Musbah, Keon Il Cha, Chang Je Park [Sejong Univ.]

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포스터번호표	논문제목 / 저자(소속)
5-P-42	Removal of Uranium Ions From Soil Washing Effluent by Neutralization Treatment Hyun-Kyu Lee, Byung-Moon Jun, Seeun Chang, Tack-Jin Kim, Seong-Bin Park [KAERI]
5-P-43	Comparison Between Decision-Making Approches for Evaluating Decommissioning Waste Treatment Process Inhye Hahm, Sujung Min, Eunjoong Lee, Sang Bum Hong [KAERI]
5-P-44	Development Trend of Thermal Treatment Technology Seokju Hwang, Jun-seok Nam, Young Hwan Hwang, Yanghee Yang [KHNP CRI]
5-P-45	Review on High Volume Reduction Technologies to Ensure Decommissioned Radioactive Waste Treatment and Disposal Suitability Cheon-Woo Kim, Hyejin Jung, Seok-Ju Hwang [KHNP CRI]
5-P-46	Wastewater Treatment by Chemical Precipitation and Adsorption After Soil Washing From Cesium Contaminated Soil Hye-Nim Kim, Kyung Jin-Lee [Chungnam Natl. Univ.], June-Hyun Kim, Sung-Man Kim, Il-Gook Kim, In-Ho Yoon [KAERI],
5-P-47	A Case Study on Decontamination Method and Soil Characteristics at Overseas Sohee Cha, Kwangheon Park [Kyung Hee Univ.]
5-P-48	PTC Analysis Method for Evaluating the Diffusion Depth of Radionuclide Ji-hyun Yu, Seung-gi Jeong, Seong-hoon Kim, Ho-min Jeon, Jong-hwa Kim, Kyeong-ho Han, Jang-soo Seo [SAE-AN ENERTECH]
5-P-49	The Treatment of ¹⁴CO₂ Using Glass-based Adsorbent Sung-Jun Kim, Jung-Hyun Lee [Korea Univ.], Hee-Chul Yang, Hee-Chul Eun, Keunyoung Lee, Hyung-Ju Kim [KAERI]
5-P-50	In-situ Radioactivity Analysis Using ISOCS for the High-level Radiation Source Ho-min Jeon, Kyeong-ho Han, Jong-hoa Kim, Jae-joon Song, Seong-hoon Kim, Ji-hyeon Yu, Seung-gi Jeong, Jang-soo Seo [SAE-AN ENERTECH]
5-P-51	Synthesis of Pollucite Using Korean Natural Zeolite at Temperature Below 100℃ Seokju Hong, Wooyong Um [POSTECH]
5-P-52	A Study on Mockup Test of Reactor Vessel Internal Segmentation Young Hwan Hwang, Mi-Hyun Lee, Seok-Ju Hwang, Hang-Rae Cho, Ji-Hoon Lee [KHNP-CRI] Nam-Kyun Kim [KEPCO KPS]

포스터번호표	논문제목 / 저자(소속)
5-P-53	A Study on Radiation Protection During Reactor Vessel Segmentation Young Hwan Hwang, Mi-Hyun Lee, Seok-Ju Hwang, Ji-Soo Yoon, Ji-Hoon Lee [KHNP-CRI], Hae-Woong Kim, Kwang-Soo Park [Doosan HIC]
5-P-54	A Study on Secondary Gaseous Waste From Reactor Vessel Segmentation Young Hwan Hwang, Mi-Hyun Lee, Seok-Ju Hwang, Moon-Hyung Jo, Ji-Hoon Lee [KHNP-CRI], Hae-Woong Kim, Kwang-Soo Park [Doosan HIC]
5-P-55	A Study on Mockup Test of Reactor Vessel Segmentation Young Hwan Hwang, Mi-Hyun Lee, Seok-Ju Hwang, Hang-Rae Cho, Ji-Hoon Lee [KHNP-CRI], Hae-Woong Kim, Kwang-Soo Park [Doosan HIC]
5-P-56	Neutron Activation Calculations for the Shielding Window of DFDF Hot Cell at KAERI Siwan Noh, Jonghui Han [KAERI]
5-P-57	Self-propelled Magnetic Illite Microspheres for Active Removal of Radiocesium Chan Woo Park, Taeun Kim, Yeonsoo Lee, Hee-Man Yang [KAERI]
5-P-58	Emulsion-based Synthesis of Hollow Silica Microspheres Jong-Yun Kim, Sang Ho Lim, Sang-Eun Bae [KAERI], Suk-Bon Yoon [KHNP]
5-P-59	Monte Carlo Characterization of Depth Distribution of Neutron Activation in the Bio-shield of Concrete Depending on Distance From Reactor Vessel Hyeok Soo Kwon, Ill Hyuk Han, Geehyun Kim, Eun-Hee Kim [Seoul Natl. Univ.]
5-P-60	Development of Human Error Simulation Stress Model in Nuclear Power Plant Decommissioning Activity Chang-Su Nam, Min-Sik Kim, Byung-Sik Lee [Dankook Univ.]
5-P-61	A Study on the Mass Balance Verification of the Decontamination Reagent Regeneration Process by the Cation Ion Exchange in the Magnetite Oxide Reductive Decontamination by Oxalic Acid Jae Kwan Park, Soo In Lee, He Rim Kim, Byung-Chul Lee [Hannam Univ.], Wonzin Oh [Kyungpook Natl. Univ.]
5-P-62	DeCoEx : Decommissioning Waste and Cost Analysis Tool Using Excel Seung-Hyuk Jung, Hyun-Woo Song, Nak-Hoon Sung [KONES Corp.]

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Radiation Environment and Safety

| 좌장 | 지영용[KAERI], 정성엽[주교도기술]

◆ 6.3(목) 09:00 ~ 12:00

◆ 4F 현인실

발표시간	논문제목 / 저자(소속)
09:00~09:20	Quantum Dot-based Monolithic Plastic Scintillator for Gamma Detection Su Jung Min, Jae Hak Cheong [Kyung Hee Univ.] Chang Hyun Roh, Sang Bum Hong, Bum Kyung Seo [KAERI]
09:20~09:40	Development of Beta-spectrometer Comprising Multi-wire Chamber and Plastic Scintillator Hyeonmin Lee, Hee Reyoung Kim [UNIST]
09:40~10:00	Preliminary Study on Gamma Ray Analysis via Artificial Neural Network Method for a Seawater Monitoring System Sungyeop Joung, Young-Yong Ji [KAERI]
10:00~10:20	Uncertainty Analysis of the Clearance Levels of SRS-44 Model Using Monte Carlo Simulation Ji-Hoon Han, Jae-Hak Cheong [Kyung Hee Univ.]
10:20~10:40	Break Time
10:40~11:00	A Preliminary Study on the Factors to Reduce Radiation Exposure to Workers During Decommissioning Overseas Nuclear Power Plants Eun Ji Lee, Wo Suk Choi, Sung Jun Kim, Jin Ho Son, Tae Young Kong [Chosun Univ.]
11:00~11:20	Radioactive Effluents Released From Korean Nuclear Power Plants and the Resulting Dose to the Public Wo Suk Choi, Eun Ji Lee, Sung Jun Kim, Jin Ho Son, Tae Young Kong [Chosun Univ.]
11:20~11:40	Long-term Evaluation of Desorbed ¹³⁷ Cs Transport Through Porous and Fractured Aquifers Below the Artificial Lake Jaehyun Lee, Weon Shik Han, Jeonghwan Hwang [Yonsei Univ.], Peter K. Kang, SeonKyoo Yoon [Univ. Minnesota], Sungwook Choung [KBSI], Jehyun Shin [KIGAM]
11:40~12:00	Development of a Compact Boron Removal Device Which Minimizes the Spent Resin Generation Based on Desalination Technology Gibeom Park, Yongmin Park, Minhyuk Yoon, Woohyeon Rhee, Sungjoo Kang, Seungil Kim, Duckwon Kang [Elim-Global Inc.]

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Radiation Environment and Safety

| 심사위원 | 이철우[KAERI], 김소라[KAERI]

◆ 6. 2(수) 09:00 ~ 4(금) 18:00

◆ E-Conference(www.krs.or.kr)

포스터번호표	논문제목 / 저자(소속)
6-P-01	In-situ Radioactivity Measurement for a Radioactive Wastewater Decay Tank Sangrok Kim, Jaeseung Heo, Gisub Kim [KIRAMS]
6-P-02	Measurements of Gamma-ray Source Position and Dose Rate Using Plastic Scintillation Optical Fiber Bundle Detector Siwon Song, Jinhong Kim, Jae Hyung Park, Seunghyeon Kim, Taeseob Lim, Jin Ho Kim, Bongsoo Lee [Chung-Ang Univ.]
6-P-03	Fast Temperature Compensation for NaI(Tl) Spectrum Using Count-Center Method Yong-Ju Lee , Jung-Ki Shin, Yu-Sung Jang, Sang-Yong Kim [Neosiskorea], Sang-Beom Hong [KAERI]
6-P-04	A CdS/ZnS Quantum Dot-based Plastic Scintillator Su Jung Min, Jae Hak Cheong [Kyung Hee Univ.], Chang Hyun Roh, Sang Bum Hong, Bum Kyung Seo [KAERI]
6-P-05	Measurements and Estimation of Beam Qualities of X-ray Spectra With CdTe Detector Hyeongjin Kim, Yu-ho Weon [KHNP-CRI]
6-P-06	A Linear Range for the Assessment of Dose Rate Using Airborne Gamma-Ray Spectrometer Based on CZT Detectors Young-Yong Ji, Sungyeop Joung [KAERI]
6-P-07	The New Modular Gamma Probes for Finding out Hidden Nuclear Materials in a Restricted Area Myungsoo Kim, Dong Yeong Kim, Jihye Seo [KINAC]
6-P-08	Optimization of the Analytical Process for Radiostrontium in Soil Yun Jae Seo [Dong-A Univ.], Ji Eun Lee, Hyo Jin Kim, Seong Yun Mok, Seong Hun Lee, Yong Uk Kye, Jeong Gi Kim, Yeong-Rok Kang [DIRAMS]
6-P-09	Development of a Radiation Monitor Using Indoor Location Tracking Technology for Nuclear Power Plant Dismantling Sites Yong-Ju Lee, Jung-Ki Shin, Yu-Sung Jang, Sang-Yong Kim [Neosiskorea], Sang-Beom Hong [KAERI]

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포스터번호	논문제목 / 저자(소속)
6-P-10	Development of High-pressure Ion Chamber System for Nuclear Power Plant Decommissioning Site Hee-Kyun Baek, Jung-Ki Shin, Yu-Sung Jang, Sang-Yong Kim [Neosiskorea], Sang-Beom Hong [KAERI]
6-P-11	Development of a Radiation Direction Detecting System for Searching Orphan Sources Hee-Kyun Baek, Jung-Ki Shin, Yu-Sung Jang, Sang-Yong Kim [Neosiskorea], Sang-Beom Hong [KAERI]
6-P-12	A Study on Probabilistic Methodology for Constructing Inverse Tracking of Source Term Estimation Shin Ae Kim [Hanyang Univ.], Yunjong Lee [KAERI]
6-P-13	Statistical Analysis of Radioactive Effluent Data From Korean Nuclear Power Plants Using R Program Ji Su Kang, Jae Hak Cheong [Kyung Hee Univ.]
6-P-14	Evaluation of Gaseous Effluent Concentration Limits Based on the ICRP Publication 103, 134, 137 for ³H, ⁶⁰Co, ¹³¹I, ¹³⁷Cs and ^{234, 235, 238}U Jong Il Lee [KAERI]
6-P-15	Review of Overseas Dose Constraints Establishment Status and Rationale Ki Hoon Kim, Hyun Su Seo, Yong Ho Jin, Hyun Jun Na, Kwang Pyo Kim [Kyung Hee Univ.]
6-P-16	Analysis of Hazard Scenario of Nuclear Facility for Preparation of Radiological Environmental Impact Assessment Report (RER) Jiyoung Song, Jongjin Kim [KAERI]
6-P-17	The Trends of Radiation Level Inside Reactor Hall and Exhaust Air on HANARO Seo-Hyun Lim, Won-Ho In, Ho-Young Choi [KAERI]
6-P-18	Comparison of Conservative and Realistic Dose Evaluation Based on the Outflow Rate of the Spent Resin Treatment Facility Jaehoon Byun, Woo Nyun Choi, Hee Reyoung Kim [UNIST]
6-P-19	Comparative Analysis of Methodologies for Dose Assessment due to the Radioactive Effluents: USNRC Regulatory Guide 1.109 and UNSCEAR 2016 Methodology Soyun Kim, Jae Hak Cheong [Kyung Hee Univ.]

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포스터번호표	논문제목 / 저자(소속)
6-P-20	Application of ALARA to Radiation Workers in Reuse of Containment Building of Kori Unit 1 Jihyang Byon, Sang June Park, Seokyoung Ahn [Pusan Natl. Univ.]
6-P-21	Dose Assessment of the Radioactive Waste Disposal Facility by Applying Representative Person Concept Hyun Su Seo, Min Young Lee, Ki Hoon Kim, Yong Ho Jin, Kwang Pyo Kim [Kyung Hee Univ.]
6-P-22	Analysis on the Domestic and Foreign Regulatory Standards for Radiation Exposure in NORM Industries Min Young Lee, Gang Woo Ryu, Kwon Jae, Byung Min Lee, Kwang Pyo Kim [Kyung Hee Univ.]
6-P-23	Review of the Domestic and Foreign Safety Management of Radon in Indoor Air Hyun Jun Na, Byung Min Lee, Min Seong Kim, Jong Hyeok Park, Kwang Pyo Kim [Kyung Hee Univ.]
6-P-24	Water Quality and Resin Performance Improvement by Removing CO₂ From Air Injection of Generator Stator Cooling System Yong-Sang Cho, Ji-Min Kim, Ki-Bang Sung [KHNP-CRI]
6-P-25	A Study on the Performance Evaluation of Boron Waste Liquid Separation/Concentration Using Electrochemical Techniques Minhyuk Yoon, Yongmin Park, Gibeom Park, Woohyeon Rhee, Sungjoo Kang, Seungil Kim, Duckwon Kang [Elim-Global]
6-P-26	Generation Status and Management Prospect for Contaminated Water in Fukushima Nuclear Power Plant Ji-Soo Yoon, Cheon-Woo Kim [KHNP-CRI], Hang-Rae Cho [KHNP]
6-P-27	Unplanned Release of Radioactive Materials to On-site Groundwater of Nuclear Power Plants in the USA Si Young Kim, Seok-Ju Hwang, Yang Hee Yang, Jung-Kwon Son [KHNP-CRI]
6-P-28	Establishment of Practical Minimum Detectable Activity Criteria of Tritium in Urine Sample for Nuclear Power Plant Workers in Korea Si Young Kim, Seok-Ju Hwang [KHNP-CRI], Moon-hyung Cho, Jung-Kwon Son [KHNP]
6-P-29	Development of Safety Shelter for Excavation Place Against Nuclear Accident S.H. Park, K.H. Park, K.H. Lee [Orionenc Co., Ltd]

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Radiochemistry and Nuclear Chemistry

| 좌장 | 박종호[전북대], 박재일[KAERI]

6. 4(금) 09:00 ~ 12:00

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발표시간	논문제목 / 저자(소속)
09:00~09:20	LA-ICP-MS Analysis for Characterization of Nuclear Materials Jeongmook Lee, Dong Woo Lee, Tae-Hyeong Kim, Junghwan Park, Jong-Yun Kim, Sang Ho Lim [KAERI]
09:20~09:40	Development of Monitoring System for Molten Salts by Laser-induced Breakdown Spectroscopy Yunu Lee, Sungyeol Choi [KAIST]
09:40~10:00	Synthesis of CeO ₂ Nanoparticles by Using Hydrothermal Method Shuvechssa Shuvo, Jun-Yeop Lee [Pusan Natl. Univ.]
10:00~10:20	Characterization of Phosphorous-Functionalized Silica Microspheres Hye Ran Noh, Jeongmook Lee, Jong-Yun Kim, Sang Ho Lim [UST], Suk-Bon Yoon [KHNP], Dong-Woo Lee, Tae-Hyeong Kim [KAERI]
10:20~10:40	Break Time
10:40~11:00	Solubility Measurement of PuO ₂ in Natural Waters Hye-Ryun Cho, Hee-Kyung Kim, Tae-Hyeong Kim, Wansik Cha [KAERI], Jueun Kim, Sangsoo Han, Wooyong Um [POSTECH]
11:00~11:20	Comparison of Chemical Analysis Methods for I ₂ and CH ₃ I Concentrations in Aqueous Samples Minsik Kim, Jei-Won Yeon [KAERI]
11:20~11:40	Radiochemical Separation of Pu, Am, Tc, Sr, Nb, Fe and Ni Isotopes in Neutron Dosimeter Samples From the Nuclear Power Plant Using Extraction Chromatographic Resins Myung Ho Lee, Kyung Sik Kim, Mi Joung Lim, Choon Sung Yoo, Byoung Chul Kim [KRIST]
11:40~12:00	Determination of ³² P of RI Wastes by Solvent Extraction and Cherenkov Counting Jung Bo Yoo, Kyunghun Jung, Mun Ja Kang, Tae-Hong Park [KAERI]

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Radiochemistry and Nuclear Chemistry

| 심사위원 | 조혜륜[KAERI], 강병만[KAERI]

◆ 6. 2(수) 09:00 ~ 4(금) 18:00

◆ E-Conference(www.krs.or.kr)

포스터번호표	논문제목 / 저자(소속)
7-P-01	Introduction to a Method for Improving Reliability of Chemical and Radionuclide Analysis Data of Nuclear Fuel Crud Samples Jei-Won Yeon [KAERI]
7-P-02	Determination of Chelating Agents in a Variety of Radioactive Waste Using UV-Vis Spectrophotometer Hyejin Cho, Jail Park [KAERI]
7-P-03	Synthesis of Three Dimensional Framework Structure for Immobilization of Radioactive Waste Dong Woo Lee, Tae-Hyeong Kim, Jeongmook Lee, Junghwan Park, Jong-Yun Kim, Sang Ho Lim [KAERI]
7-P-04	Determination of Radioactivity of Phosphorus-32 and -33 in RI Waste Using Liquid Scintillation Counter Kyunghun Jung, Jung Bo Yoo, Mun Ja Kang, Tae-Hong Park [KAERI]
7-P-05	Analytical Procedures for Measuring ³⁵ S in Radioisotope Wastes Sora Choi, Mun Ja Kang, Tae-Hong Park [KAERI]
7-P-06	Evaluation on Regeneration and Reuse of Sr-spec Resin Kyeonghui Bae, Jung Bo Yoo, Tae-Hong Park [KAERI]
7-P-07	Development of Multi-Analytical Method for Particulate Matter of Environmental Samples Using Nuclear Track Technique Chi-Gyu Lee, Joonki Kim, Junghwan Park [KAERI]
7-P-08	Structural Determination and Characterization of Metal Oxides for Immobilization of Radioactive Waste Hye Ran Noh, Jong-Yun Kim, Jeongmook Lee, Sang Ho Lim [UST], Dong-Woo Lee, Tae-Hyeong Kim [KAERI]

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7-P-09	Re-evaluation on Radioactivity of Irradiated Fission Track Detector Junghwan Park, Chi-Gyu Lee, Sang Ho Lim [KAERI]
7-P-10	A Semi-mechanistic Model for UO₂ Pellet Oxidation at 400, 500 and 700°C Ju Ho Lee, Jae-Won Lee, Seok Min Hong, Chang Hwa Lee, Yung-Zun Cho [KAERI]
7-P-11	Quantification Analysis of Various Iodine Species by Using Colorimetry Jun-Gyu Kim, Jun-Yeop Lee [Pusan Natl. Univ.]
7-P-12	Sample Pretreatment for Determination of Ce, Co, Cs, Fe, Nb, Ni, Re, Sr and U in Cemented Ion Exchange Resin Using High-Performance Microwave Digestion System Kwang-Soon Choi, Jae-seok Lee, Simon Oh, Tae-Hong Park [KAERI]
7-P-13	Performance Testing Result of Distillation Kit for Tritium Measurement Kyungwon Suh, Hye-Ryun Cho, Tae-Hong Park [KAERI]
7-P-14	Preliminary Study on the Synthesis and Properties of Radiation-Resistant Metal Organic Framework for N₂, CO₂, Kr and Xe Selective Sorption Viktoriya Kim, Jung Hwan Park, Jong-Yun Kim, Sang Ho Lim [UST], Dong Woo Lee, Jeongmook Lee, Tae-Hyeong Kim [KAERI]
7-P-15	Sequential Determination of Americium, Curium, Plutonium and Strontium-90 in Sludge Samples for Nuclear Power Plant Jiyoung Park, Hyuncheol Kim, Jong-Myoung Lim, Sang-Do Choi, Sang Bum Hong [KAERI]