

춘계 학술발표회 E-CONFERENCE

2020. 7. 29(수) ~ 31(금)

www.krs.or.kr



KOREAN
RADIOACTIVE WASTE
SOCIETY

2020



사단 한국방사성폐기물학회
법인 Korean Radioactive Waste Society

초 대 의 글

한국방사성폐기물학회

2020년 춘계학술발표회에 회원님을 모십니다.

존경하는 회원 여러분,

코로나19의 팬데믹 위협으로 시작된 2020년입니다. 우리 학회는 오프라인 학술발표회에 희망을 갖고 당초의 6월 개최 일정을 7월 말로 연기했습니다만 상황은 호전될 기미가 보이지 않고 있습니다. 이에, 아쉽지만 이번 춘계행사는 온라인 방식을 주축으로 하되 일부 프로그램은 오프라인으로도 진행하는 하이브리드 학술대회로 진행합니다. 이러한 방식은 처음이라서 다소 불편하고 번거로운 부분도 있을 것입니다. 하지만, 앞으로는 예년처럼 대규모 대면행사를 갖는 것이 어려울 수도 있다는 것이 감염병 전문가들의 지배적인 의견이어서 온라인 학술대회가 새로운 학술행사 트렌드로 자리잡을 것으로 예상됩니다. 이에, 새로운 시대 변화를 견인하기 위해서 회원님들께 예년보다 더 적극적인 참여와 관심을 요청드리는 바입니다.

한편, 국가적으로 우리 학회의 전문분야와 관련된 여러 현안사업이 진행되고 있습니다. 사용후핵연료 관리정책 재검토 위원회가 무거운 걸음을 옮기고 있으며, 사용후핵연료 저장과 처분 관련 R&D사업은 예비타당성조사를 통과하여 2021년부터 사업 시행을 앞두고 있습니다. 또한, 해체 분야의 R&D사업은 2022년 사업 시행을 목표로 현재 본 예타가 진행되고 있습니다. 중저준위폐기물 관리의 경우, 핵종분석을 포함한 품질관리 방안이 요구되고 있습니다. 이에 우리 학회는 사용후핵연료 관리정책이 원만히 재정립될 수 있도록 다양한 형태로 적극 지원하고 있으며, R&D사업 기획 지원 및 법인회원사 간 협업에도 최선을 다하고 있습니다.

회원 여러분, 우리 학회의 학술지인 JNFCWT가 지난 2019년 3월호부터 SCOPUS에 등재되었으며 금년 9월호부터는 영문 학술지로 발간됨을 공지한 바 있습니다. 편집위원회에서는 앞으로 수 년 내에 SCIE 등재를 목표로 열심히 활동하고 있습니다. 이를 위하여 회원님들의 적극적인 투고와 인용, 관심이 필요합니다. 뿐만 아니라 2020 춘계학술발표회를 비롯하여 우리 학회가 주관하는 학술행사가 성황리에 개최될 수 있도록 회원 여러분의 적극적인 참여와 아낌없는 성원 부탁드립니다.

감사합니다.

2020년 7월

한국방사성폐기물학회 회장 김 경 수

Kyungsu Kim

CONTENTS

I . KRS 임원 및 연구분과위원회 3

II . E-CONFERENCE INFORMATION 4

III . SPECIAL EVENT 6

ONE. WORKSHOP 6

 『원전해체 전력산업기술기준(KEPIC) 개발 방향 및 향후 적용 방안』

TWO. 견학프로그램 7

 - (주)세아베스틸 군산 공장

IV. 분과별 논제 및 발표자 8

 제1분과 핵주기정책·규제 및 비확산 9

 제2분과 사용후핵연료 처분전관리 12

 제3분과 고준위폐기물 처분 15

 제4분과 중저준위폐기물 관리 17

 제5분과 제염해체 22

 제6분과 방사선환경 및 안전 26

 제7분과 방사화학 30

I . KRS 임원 및 연구분과위원회

◆ 임원

직 위		성 명(소속)
회 장		김경수 (한국원자력연구원)
감 사		송중순 (조선대학교), 박원재 (한국원자력안전기술원)
부회장		강문자 (한국원자력연구원), 정찬우 (한국원자력안전기술원), 윤종일 (한국과학기술원), 손순환 (한국수력원자력㈜), 최광섭 (한국원자력환경공단)
이 사	총 무	조동건 (한국원자력연구원), 윤형준 (한국전력기술㈜)
	재 무	서범경 (한국원자력연구원), 이성기 (한전원자력연료㈜)
	편 집	이한수 (한국원자력연구원), 박병기 (순천향대학교)
	학 술	정재학 (경희대학교), 엄우용 (포항공과대학교)
	사 업	이희환 (한국수력원자력㈜), 김성수 (두산중공업㈜)
	국제협력	김희령 (울산과학기술원), 최성열 (한국과학기술원)
	대외협력	구정희 (한국원자력연구원), 이상진 (한국원자력환경공단)
무임소		문주현 (단국대학교), 안상면 (한국원자력안전기술원), 채병곤 (한국지질자원연구원), 김낙점 (한전KPS㈜), 김효정 (부산대학교)
기술정책연구소장		김창락 (한전국제원자력대학원대학교)
고 문		김창락 (한전국제원자력대학원대학교), 송기찬 (한국원자력연구원)

◆ 연구분과위원회

분 과	분과위원장	간 사
핵주기정책·규제 및 비확산	안성규 (한국원자력연구원)	한재준 (한국원자력통제기술원)
사용후핵연료 처분전관리	김용덕 (한국수력원자력㈜)	김기영 (한국수력원자력㈜)
고준위폐기물처분	김건영 (한국원자력연구원)	김진섭 (한국원자력연구원)
중저준위폐기물관리	조천형 (한국원자력환경공단)	권기정 (한국원자력환경공단)
제염해체	김천우 (한국수력원자력㈜)	황종선 (한국수력원자력㈜)
방사선환경 및 안전	서경석 (한국원자력연구원)	지영용 (한국원자력연구원)
방사화학	박태홍 (한국원자력연구원)	임상호 (한국원자력연구원)

II . E-Conference Information

2020. 7. 29(수) 10:00 ~ 31(금) 18:00 www.krs.or.kr



E- Conference 참여 안내

- E-Conference 접속시 크롬(Chrome)브라우저 또는 Internet Explore 11 이상을 추천합니다.
- 등록자 1인 1계정 로그인입니다. (중복로그인은 불가능합니다.)
- 논문발표내용은 등록자에 한해, KRS 2020 춘계학술발표회 기간(2020. 7. 29 10:00 ~ 31 18:00, 3일간) 동안 희망하는 시간에 자유롭게 스트리밍으로 시청하실 수 있으며, 행사기간 종료후에는 서비스되지 않습니다.
- 모든 발표 동영상 및 발표자료 PDF의 다운로드/복사/복제 및 무단 전제는 절대 불가합니다.
- 각 논문별 제공되는 Q&A 게시판을 활용해 논문별로 댓글을 통해 질의를 할 수 있고, 발표자도 그 질의의 대댓글로 응답할 수 있습니다.
 - 질의는 일과시간(09:00~18:00)에만 등록해 주시기 바랍니다.
 - 질의 등록시 발표자에게 문자로 통보됩니다.
- E-Conference 접속자에 한해 행운권 추첨이 있습니다.

일정표

7월 29일(수)		7월 30일(목)	7월 31일(금)
E-Conference			
Special Event One. WORKSHOP		Special Event Two. 견학프로그램	
원전해체 전력산업기술기준(KEPIC) 개발 방향 및 향후 적용 방안 (서울대학교 호암교수회관)		1회차 (세아베스틸 군산공장)	2회차 (세아베스틸 군산공장)

Ⅱ . E-Conference Information

- ◆ 참가등록 안내

 - 참가등록비가 온라인 개최로 인하여, 오프라인 대비 정회원 A , 사전등록 기준 45% 할인되었습니다.
 - 논문발표자는 발표유형 및 학회 참가여부와 관계없이, 7.20 까지 등록비를 필수로 납부하여야 합니다.
 - 취소 및 환불은 행사 시작일 이전까지만 가능합니다. (7.29 이후 환불 불가)
- ◆ 참가등록 방법

 - 계좌입금 : 우리은행 268-069231-13-001 (예금주 : 사단법인 한국방사성폐기물학회)
 - 카드결제 : 홈페이지를 통한 온라인 결제 또는 사무국 방문 직접 결제

◆ 등록비 안내

회원구분		참가등록비
회 원	평생회원, 정회원A	7만원
	정회원 B	12만원
	정회원 C	13만원
	학생회원	4만원
비회원	일반	14만원
	학생	5만원
워크숍	일반	5만원
	학생	3만원

◆ 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 : 2020년도 연회비 납부자 정회원 B : 2020년도 연회비 미납자 정회원 C : 2019~2020년도 연회비 연속 미납자
평생회원	2만원	50만원	정회원 연회비 10년치 분을 일시불로 납부한 자

III. SPECIAL EVENT ONE. Workshop

- ◆ **행사명** 원전해체 전력산업기술기준(KEPIC) 개발 방향 및 향후 적용 방안
- ◆ **일 시** 2020. 7. 29(수) 13:00~18:00
- ◆ **장 소** 서울대학교 호암교수회관
- ◆ **세부일정**

진행 : 최근석 [대한전기협회]

시 간	내 용	발표자/ 소속
13:00	학회장 개회사	김경수 학회장
13:10	원전 해체계획서에 대한 주요 안전심사 고려사항	최경우 [한국원자력안전기술원]
13:40	원전해체 분야 KEPIC 표준화	최근석 [대한전기협회]
14:10	원전 1차측 주요기기 해체 기술 기준 수립 방안	손희동 [두산중공업]
14:40	Coffee Break	
15:00	해체원전 방사화폐기물 등급분류를 위한 방사선원항 평가 방법	박재원 [미래와도전]
15:30	원전해체 제염기술 분류 및 표준화	김선병 [한국원자력연구원]
16:00	해체원전 부지복원 및 안전성 평가 방안	박상준 [부산대]
16:30	해체원전 인출재료 활용연구를 위한 기술표준화 방안	황성식 [한국원자력연구원]

- ※ 참가등록비 : 일반 5만원, 학생 3만원(자료집 제공, 식사 미제공)
- ※ 참가인원 : 선착순 120인
코로나 19로 인한 생활속 거리두기(생활방역) 세부지침 준수를 위하여, 행사장 내 참가자간 거리두기 예정으로 참가인원을 제한하오니 이점 양해 부탁드립니다.
- ※ 참가자 모두에게 KEPIC에서 제공하는 소정의 기념품이 제공되며, KEPIC 전문가 인력풀에 등록하시는 분은 별도의 기념품이 추가 제공됩니다.
- ※ 주차비는 무료입니다.

Ⅲ. SPECIAL EVENT TWO. 견학프로그램

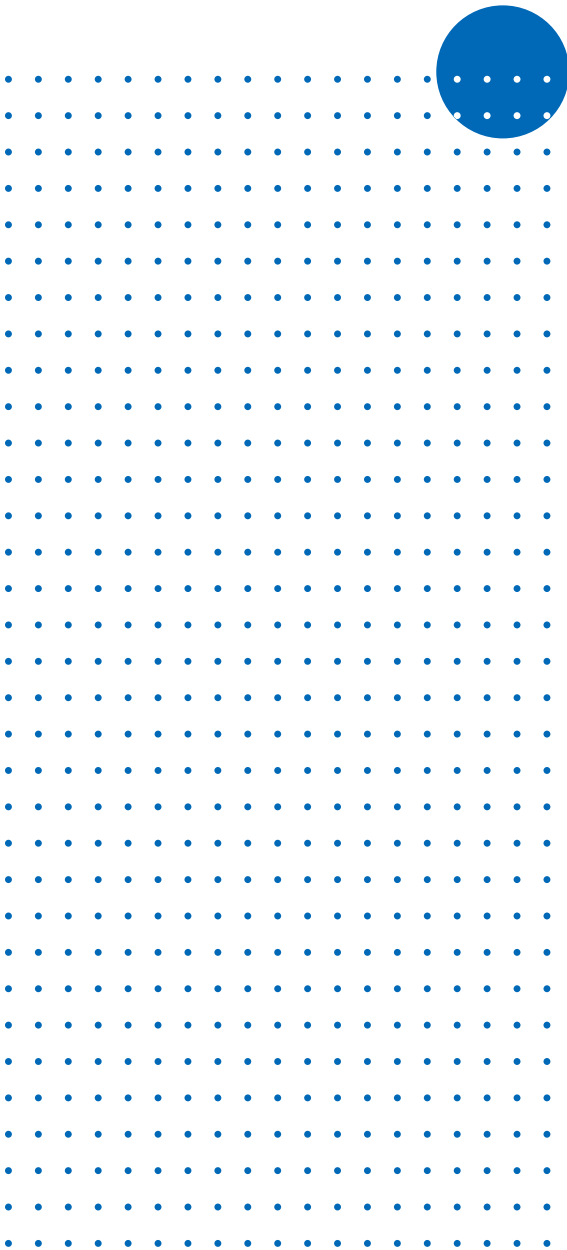
- ◆ **일 시** 2020. 7. 30(목) 및 7. 31(금) 각 1회
- ◆ **장 소** ㈜세아베스틸 군산 원자력공장
- ◆ **세부일정**



10:50	세아베스틸 단조 주차장 도착, 신원확인 및 출입절차 진행
11:00	인사말, 세아베스틸 소개 동영상 시청
11:30	단조공장 및 가공공장 견학
12:30	중 식
14:00	원자력공장 견학 (Dual Purpose Cask)
15:00	종 료

- ※ 참가등록비: 무료 (중식제공 / 단, 학술발표회 참가자에 한해 신청가능)
※ 참가인원: 선착순 50인 마감 (단체이동 40인- 버스 2대에 20인씩 탑승 / 개별이동 10인)
※ 단체이동시 09:00 KAERI-INTEC 주차장 집결-출발 / 16:30 KAERI-INTEC 주차장 도착종료예정

분과별 논제 및 발표자



제1분과. 핵주기정책·규제 및 비확산 ORAL

Nuclear Fuel Cycle Policy, Regulation and Non- Proliferation

| 심사위원 | 이정현[KINAC], 박세환[KAERI]

0-01-001	Economic Viability of Nuclear Fuel Cycle Systems Hyo On Nam, Jang Hong [KAERI]
0-01-002	Applying Case-Specific Transportation Conditions Using Satellite Imagery : Tracking Nuclear Materials in North Korea Hojung Do, Minsoo Kim [KINAC]
0-01-003	Development of an Integrated Control System for Neutron Interrogation Wonjong Song, Sungmin Kim, Seungmin Lee, Chul Heo, Ju Young Jeon, Myungsoo Kim, Kyung Taek Lim, Heejun Chung [KINAC]
0-01-004	Estimating Sample Multiplication via Asymmetry Analysis of Prompt Neutrons Angular Distribution Seonkwang Yoon [UST], Hee Seo [JBNU], Young-Su Kim [KIRAMS], Chaehun Lee, Hodong Kim [KAERI]
0-01-005	A Comparison of Image Reconstruction Algorithms for Safeguards Application Ju Young Jeon, Myungsoo Kim, Sungmin Kim, Dong Yeong Kim, Yewon Kim, Heejun Chung [KINAC]
0-01-006	Design Criteria of Safeguards Seals for Real-Time Verification Jihyun Ahn, Junsung Park, Hayoung Sim, Hee Seo [JBNU] Jung-ki Shin, Sangyong Kim [NEOSIS]

핵주기정책·규제 및
비확산

사용후핵연료
처분전관리

고준위폐기물 처분

중저준위폐기물 관리

제염해체

방사선환경 및 안전

방사화학

제1분과. 핵주기정책·규제 및 비확산 POSTER

Nuclear Fuel Cycle Policy, Regulation and Non- Proliferation

| 심사위원 | 한재준[KINAC], 서희[JBNU]

P01001	A Study on the Application of Artificial Intelligence (AI) in the Field of Nuclear Export Control Beom Seok Shin, Su Jeong Kim [KINAC]
P01002	Introduction of Technology Development for Performance-based Physical Protection Regulation Seungsik Yu, Wooseub Kim [KINAC]
P01003	A Study on Approaches of Strengthening Access Control Authorization at Nuclear Power Plants Jae San Kim [KINAC]
P01004	Coupled Analysis Methodology of Remote Sensing Signals to Estimate Clandestine Nuclear Activities Nam Kyung Kim [KINAC]
P01005	Uranium Measurement in Electro Refining Salt Using Laser Induced Breakdown Spectroscopy (LIBS) Combined With Salt Sampling Seul-Ki Han, Se-Hwan Park, Seong-Kyu Ahn [KAERI]
P01006	Text Data Analysis of Social Perception of Pyroprocessing in Korea Ji-song Jeong [UST], Ho-Dong Kim, Seung-kyu Ahn [KAERI]
P01007	Shielding Material Design for Use of High-level Area Containment Device Woo-Seok Heo, Sangyong Kim, Yong-Hee Hong, Jung-ki Shin [NEOSIS], Hee Seo [JBNU]
P01008	Design of Active Seal on Real-Time for Safeguard Goal Jung-ki Shin, Sangyong Kim, Minyong Park, Jiyeon Namgung [NEOSIS], Hee Seo [JBNU]
P01009	Strategy Against the Investigation of Soil Samples for Denuclearization of Neighboring Countries Jung Yoon Choi, Jihye Seo, Dong Yeong Kim, Myungsoo Kim [KINAC]
P01010	Study of Likelihood Evaluation Method for Radioactive Material Releases Seok-Jun Seo [KAERI]

핵주기정책·규제 및
비확산

사용후역연료
처분전관리

고준위폐기물 처분

중저준위폐기물 관리

제염해체

방사선환경 및 안전

방사화학

제1분과. 핵주기정책·규제 및 비확산 POSTER

Nuclear Fuel Cycle Policy, Regulation and Non- Proliferation

| 심사위원 | 한재준[KINAC], 서희[JBNU]

- P01011

Building the Causal Loops and Stock-Flow Models for Estimating Cumulative Uranium Production From Denuclearization Perspective
Junghyun Lee, Seung Ho Jeong [KINAC]
- P01012

An Analysis of Satellite-Observed Characteristics for Pyongsan Milling Facilities
J. H. Lee, Minsoo Kim [KINAC]
- P01013

Study on the Economies of Scale for Disposal Facility
Hyo On Nam, Jang Hong [KAERI]

핵주기정책·규제 및
비확산

사용후핵연료
처분전관리

고준위폐기물 처분

중저준위폐기물 관리

제염해체

방사선환경 및 안전

방사화학

제2분과. 사용후핵연료 처분전관리 ORAL

Predisposal Management of Spent Nuclear Fuel

| 심사위원 | 이유호[SNU], 이창화[KAERI]

0-02-001	Overload and Underload Interlock Setpoints of Fuel Handling Equipment During Spent Fuel Handling Sang-Gyoon Chang, Hyun-Min Kim [KEPCO E&C], Jong-Pil Jung [KHNP]
0-02-002	Development of OASIS Cask Models for Kori-1 Spent Nuclear Fuel Storage Joon Gi Ahn, Young Tae Han, Myeong Hoon Lee [KEPCO E&C]
0-02-003	Electrochemical Analysis of the Formation of Intermetallic Ce-Metal (Sn, Zn) Compounds in Molten LiCl-KCl Salt Jun Woo Park, Jong-Il Yun [KAIST]
0-02-004	Analysis of the Criticality of the Spent Fuel Pool on the Consideration of the Spent Fuels Having Axial Blanket Kyu Jung Choi, Dong Jin Kim, Ser Gi Hong [Hanyang Univ.]
0-02-005	The Failure Limits for the Transverse Tearing of the Hydrided Claddings Ho-a Kim, Jae-soo Noh [ACT]
0-02-006	Investigation of Hydrogen Induced Cladding Embrittlement in Spent Fuel Pool Environment Sangbum Kim, Youho Lee [SNU]

핵주기정책·규제 및
비확산

사용후핵연료
처분전관리

고준위폐기물 처분

중저준위폐기물 관리

제염해체

방사선환경 및 안전

방사화학

제2분과. 사용후핵연료 처분전관리 POSTER

Predisposal Management of Spent Nuclear Fuel

[심사위원] 김효찬[KAERI], 김용덕[KHNP-CRI]

P02001	Effect of Salt Layer on the Distillation of Cadmium S. W. Kwon, J. H. Jang, S. J. Lee [KAERI]
P02002	Parallel Module Oxide Reduction System Sang-Kwon Lee, Sung-Wook Kim, Min Ku Jeon, Sun-Seok Hong, Eun-Young Choi [KAERI]
P02003	Consideration of the Methodology for PWR Spent Nuclear Fuel Transportation Risk Assessment Wooyong Choi, Donghyo Lee, Janghwan Lim, Jaeik Kim, Seongki Lee [KEPCO NF]
P02004	Efficient Removal of Radioactive Iodine and Cobalt Ions Using Dual Functional Nanocomposite Adsorbent Jung Eun Park, Ha Eun Shim, Jongho Jeon [KNU]
P02005	Ag-Impregnated Hydrophobic Aluminosilicate Aerogel Preparation Jae-Won Lee, Seok-Min Hong, Ju-Ho Lee, In-Gyu Jeon, Yung-Zun Cho [KAERI]
P02006	Zr Recovery Process Using Electrowinning in Chloride-fluoride Mixed Molten Salts Chang Hwa Lee, Sung-Jai Lee [KAERI], Deok Yoon Kang, Jong-Hyeon Lee [CNU]
P02007	Scenarios and Instruments Locations for Heavy Trailer Empty Weight Test to Calibrate Multi-body Dynamics Modeling Jae Hoon Lim, Yun-young Yang, Gil-Eon Jeong, Jongmin Lim, Sang Soon Cho, Woo-seok Choi [KAERI]
P02008	Removal of Rare Earth Elements From U-Mg-RE Metals Using UCl_3 in the LiCl-KCl Molten Salt Seungwoo Paek, Gha-Young Kim, Junhyuk Jang, Chang-Hwa Lee, Sung-Jai Lee [KAERI]
P02009	Shielding Evaluations of KN-18 Spent Fuel Transportation Cask Using MAVRIC and SAMPLER Kyoondo CHA, Do-Yeon KIM [KHNP]
P02010	PWR SF Pyroprocessing Flowsheet Model for Economic Evaluations Hun Suk Im, Hong Jang, Hyo On Nam [KAERI]

핵주기정책·규제 및
비확산

사용후핵연료
처분전관리

고준위폐기물 처분

중저준위폐기물 관리

제염해체

방사선환경 및 안전

방사화학

제2분과. 사용후핵연료 처분전관리 POSTER

Predisposal Management of Spent Nuclear Fuel

| 심사위원 | 김효찬[KAERI], 김용덕[KHNP-CRI]

P02011	Integrity Evaluation of Large-Capacity CANDU SNF Transport Cask Under Drop Condition of Normal Transport Woo-seok Choi, Yun-young Yang, Jongmin Lim, Gil-Eon Jeong, Ki-Seog Seo [KAERI]
P02012	Mechanical Behavior Modeling of Spent Fuel Subjected to Bending Load Under Normal Conditions of Transport Donghyo Lee, Hyeongkoo Kim, Seongki Lee [KEPCO NF]
P02013	Maintenance and Emergency Response System of ACPF Argon Cell System Byungsuk Park, Jongkwang Lee, Eunyoung Choi [KAERI]
P02014	Characteristics of Capturing C-14 From Pyroprocessing Using Double Alkali Method Seok-Min Hong, Yung-Zun Cho, Juho Lee [KAERI]
P02015	Once-through Cycle Transition Scenario in Korean Energy Transition Policy Hong Jang, Hyo On Nam, Won Il Ko [KAERI]

제3분과. 고준위폐기물처분 ORAL

High-Level Waste Disposal

| 심사위원 | 김건영[KAERI], 정해룡[KORAD]

0-03-001	Water Suction Measurement of Bentonite Buffer Considering Temperature Increase Seok Yoon, Geon-Young Kim, Dong-Keun Cho [KAERI]
0-03-002	Quantitative Rock Integrity Assessment Using Artificial Intelligence Chang-Ho Hong, Jin-Seop Kim, Geon Young Kim [KAERI], Hee-Hwan Ryu [KEPRI], Gye-Chun Cho [KAIST]
0-03-003	Mineralogical Alteration and Nuclide Sorption of Bentonite Under Deep Geological Disposal Condition Bong-Ju Kim, Yong-Kwon Koh, Jae-Kwang Lee, Jang-Soon Kwon [KAERI]
0-03-004	Bio-hydro-geo-chemical Variation in a Deep Geological Disposal Facility Affected by Saline and High Alkaline Plume Jang-Soon Kwon, Yong-Kwon Koh, Bong-Ju Kim, Jae-Kwang Lee [KAERI], Baknoon Ham [Korea Univ.]
0-03-005	Anoxic Corrosion Experiment of Canister Materials in a Deep Borehole Minsoo Lee, Kyung-Woo Park, Bong-Ju Kim, Jang-Soon Kwon, Sung-Hoon Ji [KAERI]
0-03-006	Dipole Flow Tracer Test for Estimating Local Heterogeneity of Hydraulic Property Nak-Youl Ko, Kyung-Woo Park, Byeng-Hak Park, Chang Yong Lee, Sung-Hoon Ji [KAERI]

핵주기정책·규제 및
비확산

사용후핵연료
처분전관리

고준위폐기물 처분

중저준위폐기물 관리

제염해체

방사선환경 및 안전

방사화학

제3분과. 고준위폐기물처분 POSTER

High-Level Waste Disposal

| 심사위원 | 박의섭[KIGAM], 성동훈[JNU]

P03001	Module Design on the Down-ENDER for PWR Nuclear Spent Fuel Assembly in Head-End Younghwan Kim, Yungzun Cho, Juho Lee, Jinmok Hur [KAERI]
P03002	Comparative Analysis on the Methods for Multi Rods Extraction in Head-End Younghwan Kim, Yungzun Cho, Seckmin Hong, Jinmok Hur [KAERI]
P03003	The Role of Decay Heat Analysis During the Encapsulation of Spent Fuels Jongtae Jeong, Dong-Keun Cho [KAERI]
P03004	Hydro-Thermal Interactions of Double-layered Buffer in Multi-deposition Holes With Consideration of Excavation Damaged Zone Jin-Seop Kim, Chang-Ho Hong, Geon-Young Kim [KAERI]
P03005	Application of Vapor Equilibrium Technique in Measuring and Controlling the Suction of Unsaturated Bentonite Buffer Jae Owan Lee, Seok Yoon, Geon Young Kim [KAERI]
P03006	Species Distributions of Dissolved U(VI) and Adsorbed U(VI) on Amorphous SiO ₂ Surface Euo Chang Jung, Tae-Hyeong Kim, Hee-Kyung Kim, Hye-Ryun Cho, Wansik Cha, Min Hoon Baik [KAERI], Yongheum Jo, Jong-Il Yun [KAIST]
P03007	A State of the Art on the Reversibility and Retrievability of Geological Disposal System for a High Level Radioactive Wastes Jong-youll Lee, In-young Kim, Heui-joo Choi, Dong-keun Cho [KAERI]
P03008	Adsorption of Nuclides Onto Bentonite: Preliminary Batch Experimental Results Bong-Ju Kim, Yong-Kwon Koh, Jae-Kwang Lee, Jang-Soon Kwon [KAERI]
P03009	Preliminary Study on the Evolution History of Fractures and Fracture Fillings of Deep Granitic Rock From KURT Site Soolim Jung, Sung-Hoon Ji, Kyung-Su Kim [KAERI]

핵주기정책·규제 및
비확산

사용후핵연료
처분전관리

고준위폐기물 처분

중저준위폐기물 관리

제염해체

방사선환경 및 안전

방사화학

제4분과. 중·저준위폐기물관리 ORAL

Low and Intermediate Level Radioactive Waste Management

| 심사위원 | 최성열[KAIST], 홍대석[KAERI]

0-04-001	Radiological Safety Evaluation of Radioactive Concrete Waste at Processing Facility in Dismantling of Kori Unit 1 Choong Wie Lee, Hee Reyoung Kim [UNIST]
0-04-002	Preliminary Evaluation of the Exposure Dose of Radiation Workers for Decommissioning Waste in the Additional Storage Building at the Gyeongju LILW Disposal Facility Rin-Ah Kim, Ho-Seog Dho, Tae-Man Kim, Chun-Hyung Cho [KORAD]
0-04-003	Enhancement Methods for Management of LILW Containing Chemically Toxic Materials Based on Results of Reviewing the Current Status in Korea Suk Nam Lim, Kyu Sup Choi, Moon Oh Kim [KONES]
0-04-004	Preliminary Study for Deriving the Optimal On-road Transportation Route of Low- and Intermediate-Level Radioactive Waste Generated From Domestic NPPs Kinam Kwon, Minsu Ju, Jinyoung Chung, Jungho Song, Taehoon Jeon [BRNC] Jaemin Lee [ORANO], Chankook Park [KEEI]
0-04-005	The Introduction of DQO Application in Radioactive Waste Management Life Cycle Process Kwangyoung Sohn, Changhwan Cho, Sungjong Kim [MIRAE-EN]
0-04-006	Plasma-assisted Advanced Oxidation Process Using Submerged Multi-hole Dielectric Barrier Discharge for Treating Organic Liquid Waste Sukhwal Ma, Hongrae Jeon [KAERI]

핵주기정책·규제 및
비확산

사용후핵연료
처분전관리

고준위폐기물 처분

중·저준위폐기물 관리

제염해체

방사선환경 및 안전

방사화학

제4분과. 중·저준위폐기물관리 POSTER

Low and Intermediate Level Radioactive Waste Management

| 심사위원 | 김석훈[FNC], 황영환[KHNP-CRI]

P04001	A Study on the Polymer Solidification for the Disposal of Dispersible Waste Jun yeol An, Sang Hyun Lim, Jong Soon Song [Chosun Univ.], Ki-Hong Kim [Radin]
P04002	Recovery Rate Estimation of Dissolution Method on Styrofoam Wastes for ³H and ¹⁴C Analysis Jun Woo Bae, Ki Joon Kang, Hee Reyoung Kim [UNIST]
P04003	Examination and Preliminary Evaluation of Radionuclide Leakage Model on Waste Disposal Facilities Jaechul Ha, Tae-man Kim, Chun-hyung Cho [KORAD]
P04004	Commercial Development of a Microwave Apparatus for the Thermal Treatment of the Activated Carbon Used in NPPs Seung Chul Park [KHNP-CRI]
P04005	Development of Equipment of Crushing Device for Waste Light Bulb in Nuclear Power Plants Hyung Kwon Jeong , Dong Kyu Jang, Cheol Yeong Jeong, Jeong Won Park [ACTRMT]
P04006	Performance Evaluation for Commercialization of a PVT Screening Equipment Wook Jae Yoo, Jung Min Oh, Sung Ryul Kim, Kyu Tae Park, Min Woo Seo, Sang Mook Kang [ORBITECH], Jung Ho Song [BRNC]
P04007	Consideration of the Need for the Diversification on the Source-term Assessment Model at the Near-field of LILW Disposal System Tae-man Kim, Ji-seon Jang, Chun-hyung Cho [KORAD], Jung-Woo Kim [KAERI]
P04008	A Study on Kori Unit 1 Non-fuel Waste Treatment Method Mi-Hyun Lee, Young Hwan Hwang, Ji-Hoon Lee [KHNP-CRI]
P04009	A Study on Characteristics of Spent Resin From PWR Young Hwan Hwang, Mi-Hyun Lee, Ji-Hoon Lee [KHNP-CRI]

핵주기정책·규제 및
비확산

사용후핵연료
처분전관리

고준위폐기물 처분

중·저준위폐기물 관리

제염해체

방사선환경 및 안전

방사화학

제4분과. 중·저준위폐기물관리 POSTER

Low and Intermediate Level Radioactive Waste Management

| 심사위원 | 김석훈[FNC], 황영환[KHNP-CRI]

P04010	Evaluation of Shielding Performance of Large Transport Package for Decommissioning Wastes Wooyoung Kim, Moonoh Kim, Nakhoon Sung [KONES], Jihoon Lee [KHNP-CRI]
P04011	Improvement on Conceptual Model for Post-closure Safety Assessment of Rock-cavern Type Disposal Facility Hyejin Kim, Seunghee Lee, Sukhoon Kim [FNC]
P04012	Big Data Analysis on Isotopic Trend in Various Radioactive Wastes of Decommissioned Nuclear Power Plants Hyuk Han, Seung Uk Yoo, Donghyeok Park, Yu Bin Ko, Chang Je Park [Sejong Univ.]
P04013	A Study on the Strategy of Rearrangement Integrated Radioactive Waste Classification Applying Waste Tracking System Sun Il Kim, Ki Tae Yang, Won Baek Choi, Jong Soon Song [Chosun Univ.]
P04014	A Study on the Characterization of Polymer Waste Form Incorporated Rigid Type Pellets Sang Hyun Lim, Junyeol An, Jong Soon Song [Chosun Univ.], Ki-Hong Kim [Radin]
P04015	Fluorine-Functionalized Mesoporous Silica for Selective Removal of Tritium From Nuclear Waste Water Hyojoo Kim, Bhupendra Kumer Singh, Wooyong Um [POSTECH]
P04016	Evaluation of Counting Efficiency for Simultaneous Analysis of Sr-89,90 Heewon Kim, Seon-Ha Kim, Geun-Sik Choi, Jong-Myoung Lim, Hyuncheol Kim [KAERI]
P04017	A Study on the Quantitative Evaluation Criteria of WAC Requirements for Radioactive Waste Flammable Substances Hyeongmin Park, Sangsoo Kwak, Heekyung Kim, Dongcheol Kim, Eunsuk Choi, Hyeonil Choi, Yongho Hong [ACT]
P04018	Review on the Methods for Compressing and Drum Packaging of Long-Term Decayed High-Radioactive Spent Filters in a Nuclear Power Plant Hang-Rae Cho, Ji-Hwan Yu, Kyung-Rok Park [KHNP-CRI]
P04019	2-D Scintillator Array Sensor for Measuring the Locations of Radioactive Source Jae Hyung Park, Si Won Song, Tae Seob Lim, Jin Hong Kim, Jin Ho Kim, Bongsoo Lee [Chung-Ang Univ.]

제4분과. 중·저준위폐기물관리 POSTER

Low and Intermediate Level Radioactive Waste Management

| 심사위원 | 김석훈[FNC], 황영환[KHNP-CRI]

P04020	Position-sensitive Plastic Scintillating Fiber Detector Using Time-of-Flight Technique Si Won Song, Jae Hyung Park, Tae Seob Lim, Jinhong Kim, Jin Ho Kim, Bongsoo Lee [Chung-Ang Univ.]
P04021	Review on Uncertainty of Quantitative Analysis Results by EPMA in IMEF Y. S. Choo, Y. J. Kim, B. O. Yoo, S. J. Baik, Y. G. Jin, K. S. Heo, Y. H. Jung, H. M. Kim [KAERI]
P04022	Proposal for the Improvements of Cargo Hold of the Cheongjeongnuri to Transport Decommissioning Wastes Younghwan Choi, Moonoh Kim, Jaehun Ko, Donggyu Lee, Nakhoon Sung [KONES]
P04023	Development of Specimen Identification System for Solidified Waste Characterization In kyeong Park, Ji Young Song, Dae Seok Hong, Ki Baek Shin, Yoon Do Oh, Bo Geun Choi, Hongrae Jeon [KAERI]
P04024	Conceptual Design of Material Balance of Decommissioning Wastes From Nuclear Power Plants Ga Hyun Chun, Jae Hak Cheong [Kyunghee Univ.]
P04025	Preliminary Study on the Optimal Route for Land Transportation of Low and Intermediate Level Radioactive Waste Minsu Ju, Kinam Kwon, Jinyoung Chung, Jungho Song, Taehoon Jeon [BRNC], Jaemin Lee [ORANO], Chankook Park [KEEI]
P04026	Radionuclide Behavior Modeling of Gyeongju Low - and Intermediate Level Radioactive Wastes (LILW) Repository Sang June Park, Seokyoung Ahn, Jun-Yeop Lee [PNU], Yuhwa Son [KORAD]
P04027	A study on International Experiences of Scaling Factor Development Ji Soo Yoon, Young Hwan Hwang, Hang-Rae Cho [KHNP-CRI]
P04028	Preliminary Radiation Effect Evaluation in Case of Dropping Accidents of Conceptual Disposal Containers of VLLW Decommission Waste Ho-Seog Dho, Taeman Kim, Chun-hyung Cho [KORAD]
P04029	Design and Structural Analysis of 'Inner Pack' for Effective Disposal of Decommissioning Radioactive Wastes Ho-Hyun Jang, Tae Su Kim, Moonoh Kim, Nakhoon Sung [KONES], Jihoon Lee [KHNP-CRI]

핵주기정책·규제 및
비확산

사용후핵연료
처분전관리

고준위폐기물 처분

중·저준위폐기물 관리

제염해체

방사선환경 및 안전

방사화학

제4분과. 중·저준위폐기물관리 POSTER

Low and Intermediate Level Radioactive Waste Management

| 심사위원 | 김석훈[FNC], 황영환[KHNP-CRI]

P04030	Development of Conceptual Model for Chemical and Mechanical Gradual Degradation in Near-surface Environment Ki-jung Kwon, Mi-jin Kwon, Yu-hwa Son [KORAD]
P04031	D-UF ₆ Sampling Unit Design of Safety Points Yu Jeong Choi, Jongjin Kim, Jeong-Guk Kim [KAERI]
P04032	Preliminary Studies on Neutron Activation Analysis and Residual Radioactivity Concentration of Concrete and Metal From Reinforced Concrete Sae Geun Lee, Jae Hak Cheong [Kyunghee Univ.]
P04033	Evaluation on Vitrification Process for Fukushima Liquid Waste Using Cold Crucible Induction Melter Sunghoon Hong [KHNP-CRI]
P04034	Enhancement of Belief for Safety Assessment of an LILW Trench Using Sequential Bayesian Updating: An Illustration for Annual Precipitation Youn-Myoung Lee, Min-Hoon Baik [KAERI]

핵주기정책·규제 및
비확산

사용후핵연료
처분전관리

고준위폐기물 처분

중·저준위폐기물 관리

제염해체

방사선환경 및 안전

방사화학

제5분과. 제염해체 ORAL

Decommissioning and Environmental Remediation

| 심사위원 | 김낙점[KEPCO KPS], 성낙훈[KONES]

0-05-001	Iron Isotope Detection Using Laser Ablation Molecular Isotopic Spectrometry for Hot Spot Decontamination in Nuclear Power Plant Sung-Uk Choi, Jong-Il Yun [KAIST]
0-05-002	Comparison of Preliminary DCGL_w According to Composition of Unsaturated Zone Calculated by RESRAD-ONSITE Se-Won Park, Hee Reyoung Kim [UNIST]
0-05-003	Consideration for Performing an Anticipatory Radiation Source Term Analysis in Classifying Decommissioning Wastes With MCNP Calculation Kiwchan Chung, Min Hwa Kim, Jae Won Park [FNC], Jae Yong Oh, Changyeon Yoon, Chan Geun Park, Cheon-Woo Kim [KHNP-CRI]
0-05-004	Development of Pilot-Scale Soil Decontamination System Seongjoo Kang, Minhyuk Yoon, Kukjin Seo, Woohyeon Rhee, Seungil Kim, Dukwon Kang [Elim-Global]
0-05-005	As-built Model Reconstruction for Nuclear Decommissioning Using 3D Scan Data Sungmoon Joo, Hogeon Seo [KAERI]
0-05-006	Preliminary Study of Derivation Concentration Guideline Level (DCGL) for Industrial Reuse of Nuclear Power Site Jae-Mun Han, Seung Jun Oh, Min-Jung Kim, Jung-Hee Son [HYUNDAI E&C] Hyung-Woo Seo, Kwang-ho Jo, Cheon-Woo Kim [KHNP-CRI]
0-05-007	Developing a 3-Dimensional Lithology Model to Conceptualize a Groundwater Flow System of Nuclear Power Plant Sites Changhui Park, Sunghyun Kim, Seong-Chun Jun, Jeong-Yong Cheon, Myeong-Jae Yi [GeoGreen21] Chan Geun Park, Su Hee Lee, Jong Sun Hwang [KHNP-CRI]
0-05-008	Study on Radiological Inventory Evaluation for RV/RVI of a 1,000MW PWR NPP Jae-Hun Ko, Yun-Sik Kim, Dong-Gyu Lee, Nak-Hoon Sung [KONES], Chan Geun Park, Cheon-Woo Kim [KHNP-CRI]

핵주기정책·규제 및
비확산

사용후핵연료
처분전관리

고준위폐기물 처분

중저준위폐기물 관리

제염해체

방사선환경 및 안전

방사화학

제5분과. 제염해체 POSTER

Decommissioning and Environmental Remediation

| 심사위원 | 김창규[Doosan HIC], 한재문[Hyundai E&C]

P05001	Comparison of Compton Image Reconstruction Algorithms for Estimation of Internal Radioactivity Distribution of Concrete Waste in Decommissioning of NPP Tae Woong Lee, Seong Min Jo, Nak Jeom Kim [KEPCO KPS]
P05002	Radiological Assessment on Restricted Recycle for Very Low Level Radioactive Metal Waste From NPP Ji-Hoon Lee, Mi-Hyun Lee, Young Hwan Hwang, Sunghoon Hong, Jisoo Yoon, Hang Rae Cho [KHNP-CRI]
P05003	Radiological Assessment for Clearance of Very Low Level Radioactive Concrete Waste From NPP Ji-Hoon Lee [KHNP-CRI]
P05004	Decontamination With a Single-mode Continuous Wave Fiber Laser for Nuclear Decommissioning Jae Sung Shin, Seong Yong Oh, Hyunmin Park [KAERI]
P05005	Feasibility Study on Establishment of Radwaste Treatment Facility for NPP Decommissioning Waste Management Cheon-Woo Kim, Mi-Hyun Lee, Seokju Hwang, Hyejin Jung [KHNP-CRI]
P05006	A Study on Decommissioning Procedure of a New Radwaste Treatment Facility San Chae, Jeongguk Kim, Jongjin Kim, Jinwoo Lee [KAERI]
P05007	Visibility Improvement of Objects in Turbid Underwater Images Using Deep Learning Neural Networks for Nuclear Dismantling Seung-Kyu Park, Seong Y. Oh, Jae Sung Shin, Hyunmin Park, Jonghwan Lee [KAERI]
P05008	A Study on Exposure of Workers During the Transition Period of a Permanently Shut-down NPP Hak Yun Lee, Jong Soon Song [Chosun Univ.]
P05009	A Study on the Stability of Compound of According to Temperature of Combustible Decommissioning Wastes Sang Heon Lee, Jong Soon Song [Chosun Univ.]

핵주기정책·규제 및
비확산

사용후핵연료
처분전관리

고준위폐기물 처분

중저준위폐기물 관리

제염해체

방사선환경 및 안전

방사화학

제5분과. 제염해체

POSTER

Decommissioning and Environmental Remediation

| 심사위원 | 김창규[Doosan HIC], 한재문[Hyundai E&C]

P05010	Application Method of Centrifugal Filter and Membrane Separation Process to Recover Radioactive Sludge in Nuclear Power Plant Waste Tanks Dong-Yeon Kim, Een-Hye Lee, Sang-Woon Shin [NILE PLANT]
P05011	Concept Mapping for Selecting Information Used in Decommissioning Nulcear Power Plant Gi-Lim Kim, Changyeon Yoon, Hyung-Woo Seo [KHNP-CRI]
P05012	Development of DPMIS and DB Interworking System Reflecting Decommissioning Technology Requirements Hyo Jin An, Jin Ho Park [NUDECOMM], Seung Kook Park [KAERI]
P05013	Development and Performance Evaluation of Large-area Compton Camera for NPP Decommissioning Sanggeol Jeong, Heekyung Kim, Ho Chang Yang, Yong-Ho Hong [ACT], Chan Hyeong Kim, Jae Hyeon Kim, Junyoung Lee, Hyun Su Lee [Hanyang Univ.]
P05014	Systems Engineering Application Approach to NPP Decommissioning WCP – Focused on Requirements and Processes Sun-Kee Lee, Chang-Lak Kim [KINGS]
P05015	Study on Dismantling Process for Activated Large Components of Kori Unit 1 Sunghoon Hong, Seokju Hwang, Cheon-Woo Kim [KHNP-CRI]
P05016	Development of Full-Scale Reactor Mockup Sunghoon Hong, Seokju Hwang, Cheon-Woo Kim [KHNP-CRI]
P05017	A Study on Hazardous Waste Treatment Technology Using Plasma Torch Melting Technology for Decommissionnig Seoyoung Choi, Sunghoon Hong, Jeongsu Jeong [KHNP-CRI]
P05018	A Study on Treatment of Concrete Waste From RV and RVI Segmentation Process Jeongsu Jeong, Sunghoon Hong, Seoyong Choi [KHNP-CRI]
P05019	A Statistical Analysis on Influence Factors for US Decommissioning Cost Taebin Yoon, Juyub Kim, Jaewon Park [FNC], Changyeon Yoon, Chan Geun Park, Cheon-Woo Kim [KHNP-CRI]

핵심기술개발사업
비확산

사후처리
처리전관리

고준위폐기물
처리

중저준위폐기물
관리

제염해체

방사선환경
및 안전

방사화학

제5분과. 제염해체 POSTER

Decommissioning and Environmental Remediation

| 심사위원 | 김창규[Doosan HIC], 한재문[Hyundai E&C]

P05020	HMnO₄ Preparation Performance Using KMnO₄ by Cation Ion Exchange Seungyeop Han, Wonzin Oh, Sang-June Choi [KNU]
P05021	NF/RO Hybrid Processing Study on Contaminated Surface Water / Ground Water Remediation Technology for NPP Decommissioning Seungjun Oh, Jae-Mun Han, Min-Jung Kim, Jung-Hee Son [HYUNDAI E&C], Jong Sun Hwang, Jae Yong Oh, Cheon-Woo Kim [KHNP-CRI]
P05022	Preliminary Assessment of Radiological Impact for Contaminated Groundwater During the Operation and Decommissioning Phase of NPPs Sung Ryul Kim, Jung Min Oh, Kyu Tae Park, Wook Jae Yoo, Sang Mook Kang [ORBITECH], Jong Sun Hwang, Jinwon Son [KHNP-CRI]
P05023	Technical Review on Relation of Decontamination and Dismantling Techniques to Decommissioning Costing Jihwan Yu, Kyoung Rok Park, Hangrae Cho, Younghwan Hwang, Hyung-Woo Seo, Jae Yong Oh [KHNP-CRI]
P05024	Development of Human Error Simulation Model of Decommissioning Activity of Nuclear Power Plant Chang-Su Nam, Byung-Sik Lee [Dankook Univ.]
P05025	Study on Correlation Between UCF and WDF Used in DCE Program Seung-Hyuk Jung, Hyun-Woo Song, Nak-Hoon Sung [KONES] Jae Yong Oh, Cheon-Woo Kim [KHNP-CRI]
P05026	Analysis of Decommissioning Requirements Based on Safety Case and Requirement Engineering In Gyu Chang, Jae Hak Cheong [Kyunghee Univ.]
P05027	Overseas Experiences in Application of Unrestricted Release Criteria to Cyclotron Facilities Seon Yeong Hur and Jae Hak Cheong [Kyunghee Univ.]
P05028	Segmentation of Reactor Head Scan Data Using a Deep Learning Network Sungmoon Joo, Jaehyun Ha, Ikjune Kim, Dongjun Hyun, Jonghwan Lee [KAERI]

핵주기정책·규제 및
비확산

사용후핵연료
처분·전관리

고준위폐기물 처분

중저준위폐기물 관리

제염해체

방사선환경 및 안전

방사화학

제6분과. 방사선환경 및 안전 ORAL

Radiation Environment and Safety

| 심사위원 | 지영용[KAERI], 김병직[KINS]

0-06-001	Application of Gaussian-based Fitting Function to Spectrum and Comparison of Accuracy Si Hyeong Sung, Hee Reyoung Kim [UNIST]
0-06-002	Optimized Pitch Evaluation of a Collimator for Airborne Alpha Detection System Min Ji Kim, Si Hyeong Sung, Hee Reyoung Kim [UNIST]
0-06-003	Gamma and Dual-particle Imager in the Radioactive Waste Industry Jihwan Boo, Seoryeong Park, Manhee Jeong [Jeju Natl. Univ.]
0-06-004	Development of ¹⁴ C On-line Monitoring System for Evaluation of Release Site From Stack in NPP's Joon-seok Lee, Sang-woo Noh, Nak-won Sung, Dam-hyang Kim, Seung-il Kim, Duk-won Kang [Elim Global]
0-06-005	Radiological Safety Assessment According to the Operation of 1 ton/day Spent Resin Treatment Facility Jaehoon Byun, Woo Nyun Choi, Hee Reyoung Kim [UNIST]
0-06-006	Radiation Safety Assessment According to the Accident Scenario for Commercialization of the Spent Resin Mixture Treatment Device Woo Nyun Choi, Jaehoon Byun, Hee Reyoung Kim [UNIST]
0-06-007	Source Term Estimation in Station Blackout Accident of PHWR Plant for Emergency Response Planning Jin Yoo, Tae Woon Kim, Yong Nam Kim, Hyeon Sik Chang, Seong Rae Kim [NESS] Byung-Jik Kim [KINS]
0-06-008	Application of Fluorine-functionalized Zeolite to Increase Radon Removal Jaeeun Kang, Bhupendra Kumar Singh, Wooyong Um [POSTECH]

핵주기정책·규제 및
비확산

사용후핵연료
처분·안전관리

고준위폐기물 처분

중저준위폐기물 관리

제염해체

방사선환경 및 안전

방사화학

제6분과. 방사선환경 및 안전 POSTER

Radiation Environment and Safety

| 심사위원 | 민병일[KAERI], 김승일[Elim Global]

P06001	The Temperature Changes of the HANARO Hot Water Layer After the Water Makeup Sung Woo Lee, Hyung Jin An [KAERI]
P06002	A Case of Steam Generator Secondary Tube Support Ring Cleaning and FOSAR Kyung-Wook Shin, Yun-Ki Min, Young-Seok Choi, Sang-Jung Yun, Geon-Hui Lee, Gyung-Sun Chae, Hee-Kon Jang [SAE-AN Eng.]
P06003	Analysis of Liquid Samples During Pyrolysis Process of Chemical Cleaning Wastewater Kyung-Wook Shin, Jeong-Nam Jeong, Dae-Woo Lee, Jae-Young Hong, Young-Kug Kim, Gyung-Sun Chae, Hee-Kon Jang [SAE-AN Eng.]
P06004	Research on Exposure Pathways for Workers Operating a Mobile Radiochemistry Laboratory Sang Heon Lee, Jun Yeol An, Jong Soon Song [Chosun Univ.]
P06005	Development of Monte Carlo Simulation Model for Background Radiation of Radiation Portal Monitor Hayoung Sim, Junsung Park, Jihyun Ahn, Hee Seo [JBNU], Hyeonjun Choi, Seung Woo Ji, Haneul Kim, Hong-Suk Kim [KINS]
P06006	Review of Studies Assessing Radiation Dose to the Public Due to Processed Products Containing Radioactive Materials Ye Ji Yun, Min Young Lee, Hyun Jun Na, Hyung woo Nam, Kwang Pyo Kim [Kyunghee Univ.]
P06007	Evaluation of Gaseous Effluent Concentration Limits and Radiation Protection Cost by Adoption of ICRP 103 Ki Hoon Kim, Hyun Su Seo, Jae Kwon, Kwang Pyo Kim [Kyunghee Univ.]
P06008	Sensitivity Analysis of Radionuclide Leaching Model in RESRAD-ONSITE Gang Woo Ryu, Se Jong Lee, Byung Min Lee, Kwang Pyo Kim [Kyunghee Univ.]
P06009	Development and Utilization of Portable Nuclide-analysis System for Simultaneous Measurements of Neutrons and Gamma Rays Sooyeon Park, Hui-Gyeong Kim, Hochang Yang, Yong-Ho Hong [ACT], Hongyeon Lee, Sangjun Han [RMTEC], Manhee Jeong [Jeju Natl. Univ.]

핵주기정책·규제 및
비확산

사용후핵연료
처분전관리

고준위폐기물 처분

중저준위폐기물 관리

제염해체

방사선환경 및 안전

방사화학

제6분과. 방사선환경 및 안전 POSTER

Radiation Environment and Safety

| 심사위원 | 민병일[KAERI], 김승일[Elim Global]

P06010	Performance Charge of Impregnated Activated Carbon With Operating Time Chorong Kim, Haksoo Kim [KHNP-CRI]
P06011	Feasibility Study on Quick Prediction Method of Radiation Dose Using Deep Learning Technique Byung Hee Won, Seong-Kyu Ahn [KAERI]
P06012	Development of Nuclide Identification Algorithm for Large-Capacity PVT Detector Using CountCenter Method Yong-Ju Lee, Jung-ki Shin, Su-pok Cho, Sang-Yong Kim [NEOSIS], Sang-Beom Hong [KAERI]
P06013	Development of Temperature Compensation Circuit for LaBr₃ Detection System Yong-Ju Lee, Deog-Hyeong Lee, Sang-Yong Kim, Jung-ki Shin, Ju-Hyuk Park [NEOSIS], Sang-Beom Hong [KAERI]
P06014	Establishment of X-ray Reference Radiation Field in Accordance With ISO 4037-1:2019 in KHNP-CRI Hyeongjin Kim, Yuho Won, Teag-min Jung, Seonyoung Nam [KHNP-CRI]
P06015	Monte Carlo Simulations on Oceanic Radiation Monitoring System With GAGG Detector Junsung Park, Hee Seo [JBNU], Seungeun Lee, Jae Sung Lee [SNU], Soo Mee Kim, Jung-Min Seo [KIOST]
P06016	Review of Airborne Radiation Mapping and Radiation Detection Algorithms for Radiometric Surveys Hwa Jeong Han, Byung Gi Park [Soonchunhyang Univ.], Sang Hun Shin, Beom Kyu Kim [FNC]
P06017	Design of Partial Decentralized Mobile Closed Network Using Wireless Mesh Architecture Jung Youn Choi, Dong Yeong Kim, Jihye Seo, Myungsoo Kim [KINAC]
P06018	Modular Gamma Probes to Detect and Localize a Radioactive Hotspot Jung Youn Choi, Myungsoo Kim, Yewon Kim, Sungmin Kim, Dong Yeong Kim, Ju Young Jeon, Heejun Chung [KINAC], Hyonsock Chang [SI Detection]
P06019	Source Term Modeling of Release Paths of Radionuclides From Pressurized Water Reactor After Permanent Shutdown Ji Su Kang, Jae Hak Cheong [Kyunghee Univ.]

핵주기정책·규제 및
비확산

사용후핵연료
처분·전관리

고준위폐기물 처분

중저준위폐기물 관리

제염해체

방사선환경 및 안전

방사화학

제6분과. 방사선환경 및 안전 POSTER

Radiation Environment and Safety

| 심사위원 | 민병일[KAERI], 김승일[Elim Global]

P06020	Review of OSPAR Convention Methodology to Assess Radiological Impact for Non-Human Species From Radioactive Liquid Effluents So Yun Kim, Jae Hak Cheong [Kyunghee Univ]
P06021	Development Strategy of Reactor Coolant Leakage Monitoring Technology Kwang Sin Kim, Do Kyun Park [Dae Ryun E&T], Seung Il Kim, Duk Won Kang [Elim Global]
P06022	Self-absorption Evaluation of HPGe Detector by Charging in Marinelli Beaker Using Monte Carlo Simulation Jaeseong Min, Kwanhee Lee, Sangho Lee [KINS]
P06023	Implications of Updated Root Transfer Factors to Clearance Levels Ji Hoon Han, Jae Hak Cheong [Kyunghee Univ]
P06024	A Case Study on Intakes of Radionuclides to Improve the Internal Exposure Monitoring System in Pressurized Water Reactors in Korea Si Young Kim, Young Ju Lee, Tae Young Kong, Moon Hyung Cho, Jung Kwon Son [KHNP-CRI]
P06025	Gamma-ray Source Position Sensing With Plastic Scintillating Fiber and Python Machine Learning Jinhong Kim, Seung Hyun Kim, Si Won Song, Jae Hyung Park, Jin Ho Kim, Tae Seob Lim, Bongsoo Lee [Chung-Ang Univ.]
P06026	Characteristic X-ray Detection for Determination of Decontamination Areas on Decommissioning Nuclear Power Plant Changyeon Yoon [KHNP-CRI]
P06027	Image Evaluation Using Backprojection and MLEM Method for Decommissioning Nuclear Power Plant Changyeon Yoon [KHNP-CRI]
P06028	Maximization of the Efficiency by Using Compton Event Changyeon Yoon [KHNP-CRI]

핵주기정책·규제 및
비확산

사용후핵연료
처분전관리

고준위폐기물 처분

중저준위폐기물 관리

제염해체

방사선환경 및 안전

방사화학

제7분과. 방사화학 ORAL

Radiochemistry and Nuclear Chemistry

| 심사위원 | 배상은[KAERI], 이준엽[PNU]

0-07-001	Spectroscopic and Thermochemical Investigation of U(VI)-Aromatic Carboxylate Precipitates in an Aqueous Solution Seonggyu Choi, Jong-Il Yun [KAIST]
0-07-002	The Complexation of $\text{PuO}_2(\text{CO}_3)_3^{4-}$ With Ca^{2+} and Mg^{2+} : Visible-NIR Absorption Spectroscopic Study Yongheum Jo, Jong-Il Yun [KAIST], Hye-Ryun Cho [KAERI]
0-07-003	Thermodynamic Properties on Trivalent Plutonium Hydrolysis S. K. Cho [UST], H.-R Cho, H.-K. Kim, W. Cha [KAERI]
0-07-004	Characterization of Defect Structure in Doped UO_2 Using Raman Spectroscopy Jeongmook Lee, Dong Woo Lee, Jong-Yun Kim, Sang Ho Lim [KAERI]

핵주기정책·규제 및
비확산

사용후핵연료
처분전관리

고준위폐기물 처분

중저준위폐기물 관리

제염해체

방사선환경 및 안전

방사화학

제7분과. 방사화학 POSTER

Radiochemistry and Nuclear Chemistry

| 심사위원 | 김희경[KAERI], 윤영상[Yeungnam Univ.]

P07001	Review of the Characteristics of Radioactive Waste for Disposal Kahee Jeong, Sang-Ho Lee, Eun-Hee Hong, Wook Sohn [KHNP-CRI]
P07002	Evaluation of Pre-treatment Methods for Sludge Samples of Radioactive Waste Kahee Jeong, Sang-Ho Lee, Eun-Hee Hong, Wook Sohn [KHNP-CRI]
P07003	A Comparative Study on Acid Digestion Methods of Spent Ion Exchange Resin for Radiochemical Analysis Sang-Ho Lee, Kahee Jeong, Eun-Hee Hong, Wook Sohn [KHNP-CRI]
P07004	Development of Continuous Separation Technology of Beta Radionuclides for Necessary Identification of Radioactive Waste Eun-Hee Hong, Ji Hyun Kim, Kahee Jeong, Sang-Ho Lee, Wook Sohn [KHNP-CRI]
P07005	Rapid Uranium Analysis in Water Using Phosphonate Immobilized Coin by Alpha Spectrometry Jeonghyeon Ryu, Dong June Ahn [Korea Univ.] Ji Young Park, Jong-Myoung Lim, Wanno Lee, Hyuncheol Kim [KAERI], Young Gun Ko [Sangmyung Univ.]
P07006	Cation Effect of Metal Doped UO₂ Through In-Situ High Temperature X-ray Diffraction Dong Woo Lee, Jeongmook Lee, Tae-Hyeong Kim, Junghwan Park, Jong-Yun Kim, Sang Ho Lim [KAERI]
P07007	Evaluation of Nuclear Material Holdup in Head-end Process Ju Ho Lee, Young Hwan Kim, Seok Min Hong, Jae Won Lee, Yung-Zun Cho [KAERI]
P07008	Characterization of High Burn-up Spent Fuel Based on Statistical Analysis of Spent Fuel Isotopic Composition Junghwan Park, Jong-Yun Kim, Sang Ho Lim [KAERI]
P07009	Exemption of Fission Track Detector After Irradiation in a Reactor Junghwan Park, Chi Gyu Lee, Sang Ho Lim [KAERI]
P07010	Interaction of Uranium(VI) With Aqueous Silicate at Alkaline pH Studied by Time-resolved Laser Luminescence Spectroscopy Tae-Hyeong Kim, Euo Chang Jung, Hee-Kyung Kim, Hye-Ryun Cho, Wansik Cha [KAERI], Yongheum Jo, Jong-Il Yun [KAIST]

핵주기정책·규제 및
비확산

사용후핵연료
처분·안전관리

고준위폐기물 처분

중저준위폐기물 관리

제염해체

방사선환경 및 안전

방사화학

제7분과. 방사화학 POSTER

Radiochemistry and Nuclear Chemistry

| 심사위원 | 김희경[KAERI], 윤영상[Yeungnam Univ.]

P07011	Influence of Both Zr- and Gd-Doping on the Surface Structure of UO₂ Hye Ran Noh [UST], Dong-Woo Lee, Jeongmook Lee, Hyun Myung Choe, Jong-Yun Kim, Tae-Hyeong Kim, Jung Hwan Park, Sang Ho Lim [KAERI]
P07012	Correlation Study on Grain Boundary and Electrical Conductivity of (U, Zr, Gd)O₂ Pellet Depending on Gd Doping Levels Hyun Myung Choe [Sogang Univ.], Hye Ran Noh [UST], Dong Woo Lee, Jeongmook Lee, Junghwan Park, Tae-Hyeong Kim, Jong-Yun Kim, Sang Ho Lim [KAERI]
P07013	Studies of U(IV) Nanoparticles Formation and Stability : Effects of Ionic Strength, Anions and Catechol Derivative Ligands I. H. Yoon [UST], H.-R. Cho, W. Cha [KAERI]
P07014	An Installation Progress of Laboratory Information Management System for the Radionuclide Inventory Kyungwon Suh, Kyunghoon Jung, Tae-Hong Park [KAERI], Seung Ho Kim [Lime Solution]

핵주기정책·규제 및
비확산

사용후핵연료
처분전관리

고준위폐기물 처분

중저준위폐기물 관리

제염해체

방사선환경 및 안전

방사화학