



KOREA NUCLEAR INTERNATIONAL
COOPERATION FOUNDATION

2nd Cross-sectional Seminar for the Fusion of Multidisciplinary Research

2025. 08. 01 (Fri), IMRAM, Tohoku University

Venue: Meeting room, 2F at IMRAM Administration Building (F02), Katahira Campus,
Katahira 2-1-1, Aoba-ku, Sendai 980-8577, Japan (https://www.tohoku.ac.jp/map/en/?f=KH_F02)

Sponsors: Korea Nuclear International Cooperation Foundation (KONICOF) and the
Center for Mineral Processing and Metallurgy (CMPPM), IMRAM, Tohoku University

Program:

9:00-12:00 Session 1: Student session (Chaired by Prof. Yongheum Jo)

Korean students' presentations about their accomplishments in the International
Cooperative Student Program for Nuclear Fuel Cycle Chemistry

20 min talk + 10 min discussion

Group A

Group B

[Break]

Group C

Group D

12:00-13:30 Lunch Break (90 min)

13:30-15:10 Session 2: Professional session part 1 (Chaired by Prof. Akira Kirishima)

20 min talk + 5 min discussion

[J-1] **Daisuke Akiyama**, (13:30-13:55)

Senior Assistant Professor, IMRAM, Tohoku University, Japan

*“Immobilization of Actinide-Containing Radioactive Waste via Ceramic
Solidification”*

[K-1] **Jaeyeong Park**, (13:55-14:20)

Associate Professor, Department of Nuclear Engineering, UNIST, Korea

“Redox Behavior of Zirconium and Corrosion Effects on Ni-Based Alloys in Chloride-Based Molten Salt Reactors”

[J-2] **Yoshihiro Okamoto**, (14:20-14:45)

Principal Researcher, Materials Sciences Research Center, JAEA, Japan

“Advanced analysis of multi-component and multi-phase materials like nuclear fuel debris using synchrotron radiation technology”

[K-2] **Yongheum Jo**, (14:45-15:10)

Assistant Professor, Department of Nuclear Eng., Hanyang University, Korea

“Chemical Behavior of High-Oxidation-State Radionuclides: Nb(V) and U/Np/Pu(VI) in geosphere”

15:10-15:30 Coffee Break (20 min)

15:30-17:10 Session 3: Professional session part 2 (Chaired by Prof. Jaeyeong Park)

20 min talk + 5 min discussion

[K-3] **Seok-Young Ahn**, (15:30-15:55)

Professor, School of Mechanical Eng., Pusan National University, Korea

“Towards Efficient and Safe Steam Generator Decommissioning: A Simulation-Driven Approach to Minimize Exposure and Waste”

[J-3] **Atsushi Iizuka** (Professor) and **Hsing-Jung Ho** (Assistant Professor),
(15:55-16:20)

Department of Environmental Studies for Advanced Society, Tohoku University,
Japan

“Properties and adsorption behavior of carbonated products from direct aqueous carbonation of concrete waste”

[J-4] **Akihide Hibara**, (16:20-16:45)

Professor, Department of Chemistry, School of Science, Institute of Science
Tokyo, Japan

“Mechanochemical process for recycling of fluoropolymers”

[K-4] **Jong-Il Yun, (16:45-17:10)**

Professor, Department of Nuclear and Quantum Engineering, KAIST, Korea

“Recent Developments in Radioactive Waste Management in Korea”

17:10-17:20 Closing Remarks

Prof. Nobuaki Sato (Tohoku Univ.)

18:00- Social gathering near Katahira campus, sponsored by KONICOF



Center for Mineral Processing and Metallurgy

Institute of Multidisciplinary Research for Advanced Materials, Tohoku University