

Curriculum Vitae (23.11.03)

- Name: Woo Seok Jo
- e-mail: cws5528@unist.ac.kr
- Mobile: +82-10-4841-9138



1. AFFILIATION

- 4th year in Combined Master-Ph.D. Program
- Nuclear Safety Assessment and Plant HMI Evolution (NuSAPHE) Laboratory
- Department of nuclear engineering at Ulsan National Institute of Science and Technology (UNIST, 50, UNIST-gil, Ulsan 44919, Republic of Korea)

2. EDUCATION

- Combined M.S.-Ph.D. program
 - Department of Nuclear Engineering
 - UNIST, Ulsan, Korea, 2020.03 – present
- Bachelor of Engineering
 - Department of Physics
 - Kyungpook National University, Daegu, Korea, 2014.03 - 2020.02

3. RESEARCH INTERESTS

- Human Reliability Analysis
- Dynamic Probabilistic Safety Assessment
- Multi-unit Probabilistic Safety Assessment

4. WORK EXPERIENCE

- Project
 - 2022.04 – present: A suitability study of risk measure for research facility site
 - 2020.04 – 2022.12: Development of process and methodology for feedback and evaluation of safety culture of operation organization at nuclear power plants
 - 2020.03 – 2020.09: Research on activation of SDP-RIDM (significance determination process-risk informed decision making) framework

5. CERTIFICATES

- Awards & Scholarship
- Training
 - Graphic-based nuclear power plants simulation training (Daejeon, Korea, 2021.02)
 - RELAP, TRACE, SPACE, MARS-KS, and ASYST training course (Barcelona, Spain, 2022. 06)

6. PUBLICATIONS

- SCI Papers
 1. **Wooseok Jo**, Seung Jun Lee, "Bayesian Belief Network-based Human Reliability Analysis Methodology for Start-up and Shutdown Operations in Nuclear Power Plants", *Annals of Nuclear Energy* (DOI: <https://doi.org/10.1016/j.anucene.2022.109403>)
 2. **Wooseok Jo**, Seung Jun Lee, "Human Reliability Evaluation Method Covering Operator Action Timing for Dynamic Probabilistic Safety Assessment", *Reliability Engineering & System Safety* (DOI: <https://doi.org/10.1016/j.ress.2023.109686>)
- International Conferences
 1. **Wooseok Jo** and Seung Jun Lee, "A Framework for Time-based Human Reliability Evaluation Method in Dynamic PSA", NPIC&HMIT and PSA 2023, Knoxville, U.S. (2023.07)

2. **Wooseok Jo**, Byung Joo Min, and Seung Jun Lee, "Reactor type and site-based different safety culture precursor analysis for incidents in nuclear power plants", AHFE 2022, New York, U.S. (2022.07)
 3. **Wooseok Jo** and Seung Jun Lee, "Task Analysis for Human Reliability Analysis of Startup and Shutdown Operation", 2021 ANS winter, Washington DC, U.S. (2021.11)
 4. Jeeyea Ahn, **Wooseok Jo**, Byung Joo Min and Seung Jun Lee, "A novel analytic tool providing a graded approach to safety culture attribute", 2021 ANS winter, Washington DC, U.S. (2021.11)
- International Seminars
 1. **Wooseok Jo** and Seung Jun Lee, "Development of human reliability evaluation method covering operator action timing for dynamic probabilistic safety assessment", Japan-Korea Seminar for Students and Young Researchers on HRA and HF related issues, Hokkaido, Japan. (2023.08)
 - Domestic Conferences
 1. **Wooseok Jo** and Seung Jun Lee, "An Application of Time-based Human Reliability Evaluation Method for Dynamic PSA", KNS 2023 Spring, Jeju, Korea. (2023.05)
 2. **Wooseok Jo** and Seung Jun Lee, "Bayesian Belief Network Approach for Human-Induced Unplanned Trips during Startup and Shutdown Operation", KNS 2022 Spring, Jeju, Korea. (2022.05)
 3. Manwoong Kim, Byung Joo Min and **Wooseok Jo**, "Effect Assessment of Safety Culture-related Contributors to the Events Occurred using Social Network Analysis Method", KNS 2022 Spring, Jeju, Korea (2022.05)
 4. **Wooseok Jo**, Jeeyea Ahn, Seung Jun Lee, Manwoong Kim and Byung Joo Min, "Development of Database for Incidents related to Safety Culture using Harmonized Safety Culture Model", KNS 2021 Autumn, Changwon, Korea (2021.10)
 5. Jeeyea Ahn, **Wooseok Jo**, Byung Joo Min and Seung Jun Lee, "A Quantification Method Evaluating Difficulty of Safety Culture Factors", KNS 2021 Autumn, Changwon, Korea (2021.10)
 6. Jeeyea Ahn, **Wooseok Jo**, Byung Joo Min, Seung Jun Lee and Manwoong Kim, "Influence of Nuclear Safety Culture on Incident History of Nuclear Power Plants in Korea", KNS 2020 Autumn, Virtual conference, Korea (2020.12)
 7. Jeeyea Ahn, **Wooseok Jo**, Byung Joo Min, Seung Jun Lee and Manwoong Kim, "Independent Evaluation Approaches to Safety Culture

Survey of Operational Organization: Regulatory Perspective", KNS 2020 Autumn, Virtual conference, Korea (2020.12)

8. Jeeyea Ahn, **Wooseok Jo**, Byung Joo Min, Manwoong Kim and Seung Jun Lee,, "Significance of Systematic Approach Strategy to Safety Culture in Reference to Investigation of Operating Performance Information for Nuclear Power Plants", ESK 2020 Autumn, Jeju, Korea (2020.10)