



Curriculum Vitae

Yunki Jo

T. +82-52-217-2972 / F. +82-52-217-3008 / yunki.jo@unist.ac.kr

AFFILIATION

Combined Masters and Ph.D. Program (2nd semester)
Ulsan National Institute of Science & Technology (UNIST)
UNIST-gil 50, Ulsan Metropolitan City, Republic of Korea, 44919

EDUCATION

Graduate (Combined Masters and PhD Program), Ulsan Nation Institute of Science and Technology, Korea (September, 2016 – Now)
• 1st track: Nuclear Science and Engineering
Undergraduate, Ulsan National Institute of Science and Technology, Korea (March, 2012 – August, 2016)
• 1st track: Nuclear Science and Engineering
• 2nd track: Mechanical Engineering

WORK EXPERIENCE

- BEAVRS benchmark problem analysis using CASMO-4E/SIMULATE-3
- Spent Fuel Rack Design using McCARD
- Monte Carlo Code Development (MCS)
 - Adjoint weighted kinetics parameter calculation module
 - Generalized perturbation theory using Monte Carlo simulation
- Coupling of SERPENT-2 and SIMULATE-3 for BWR full core simulation
- Internship
 - Analysis of hypothetical BWR full core with SERPENT-2/SIMULATE-3 hybrid stochastic/deterministic code (EPFL, Swiss, August, 2015 ~ November, 2015)

RESEARCH INTERESTS

- Adjoint Weighted Kinetics Parameters
- Hybrid stochastic lattice/deterministic core two-step analysis
- Generalized Perturbation Theory (GPT) in Monte Carlo

CERTIFICATES

- Awards & Scholarship
- Training (International)
 - Reactor Physics Asia eXperiment Program (α XP), Kyoto University Research Reactor Institute (Kyoto, January, 2017)
- Training (Domestic)
 - McCARD user training course, Daejeon S& Hotel (Daejeon, August, 2016)
 - MCNP user training course, Hanyang University (HIT, August, 2016)
 - McCARD workshop, Seoul National University (SNU, February, 2016)

- McCARD developer training course, Seoul National University (SNU, March, 2015)
- McCARD developer training course, Seoul National University (SNU, March, 2015)
- Geant4 Code Training, Hanyang University (HIT, January, 2015)

• Membership

**PUBLICATIONS
SCI Journal**

1. **Yunki Jo**, Mathieu Hursin, Deokjung Lee*, Hakim Ferroukhi and Andreas Pautz, “Analysis of Hypothetical BWR Full Core with SERPENT-2/SIMULATE-3 Hybrid Stochastic/Deterministic Code,” *Annals of Nuclear Energy*, (2017), under review
2. **Yunki Jo**, Chidong Kong, Jiankai Yu, Deokjung Lee* and Sihwan Kim, “High Accuracy Boronometer Design Developed for Light Water Reactor,” *Annals of Nuclear Energy*, (2017)

**International
Topical Meeting**

1. **Yunki Jo** and Deokjung Lee*, “Verification of Adjoint-Weighted Tally Calculation Capability in MCS,” *PHYSOR 2016*, Sun Valley, ID, USA, May 1-5 (2016)

**International
and Domestic
Conferences**

1. **Yunki Jo** and Deokjung Lee*, “Implementation of Adjoint-Weighted Kinetics Parameter Calculation in MCS,” *Transactions of the Korean Nuclear Society Spring Meeting, Jeju, Korea*, May 6-8 (2015)
2. Hyunsuk Lee, Wonkeong Kim, Peng Zhang, Azamat Khassenov, **Yunki Jo**, and Deokjung Lee*, “Development Status of Monte Carlo Code at UNIST”, KNS 2016 spring, Jeju, Korea, May 11-13 (2016)

PATENT