



# Curriculum Vitae

## Minyong Park

T. +82-52-217-2972 / F. +82-52-217-3006 / M. +82-10-8724-5202 /  
[saiotjs@unist.ac.kr](mailto:saiotjs@unist.ac.kr)

---

### AFFILIATION

7<sup>th</sup> semester at Master's Program  
Ulsan National Institute of Science & Technology (UNIST)  
UNIST-gil 50, Ulsan Metropolitan City, Republic of Korea, 689-798

### EDUCATION

Bachelor of Engineering

- Major: Nuclear Science and Engineering & Device Physics
- UNIST, Ulsan, Korea, 2010.2~2014.8

### WORK EXPERIENCE

- Development of Load Follow Operation System
  - Equilibrium core
  - Multi-cycle depletion
  - Load follow operation
  - Control rod search
  - Mode-K algorithm
  - DII interface
  - MARS/RAST-K coupled code
- Development of new nodal code
  - UNM (Unified Nodal Method)
  - RAST-K2.0
- Internship
  - IAEA (International Atomic Energy Agency), SMR (Small Modular Reactor) simulator development [July-August, 2014]
  - KHNP CRI (Korea Hydro & Nuclear Power Central Research Institute), Microscopic depletion module development [July-August, 2013]

### RESEARCH INTERESTS

- Load follow operation system
- Microscopic depletion method
- Nodal method

### CERTIFICATES

- Awards & Scholarship
  - Nuclear power graduate student scholarship [2015.06.01 ~ 2016.05.31]
  - Global Ph.D. Fellowship (GPF) scholarship [2015.03.01 ~ ]
- Training (International)
- Training (Domestic)

- IAEA simulator training course, KAERI [Daejeon, April, 2015]
  - Simulink for system and algorithm modeling, MathWorks training services [Seoul, September, 2014]
  - MATLAB fundamentals, MathWorks training services [Seoul, September, 2014]
  - IAEA simulator training course, KAERI [Daejeon, April, 2013]
- Membership
    - Korean Nuclear Society Student Member [September, 2014]

## **PUBLICATIONS SCI JOURNAL**

1. Farrokh Khoshahval, Minyong Park, Ho Cheol Shin, and Deokjung Lee\*, "Vanadium, Rhodium, Silver and Cobalt Self-Powered Neutron Detector Calculations by RAST-K v2.0", *Annals of Nuclear Energy*, Under review (2017)
2. Hanjoo Kim, Sooyoung Choi, Minyong Park, Deokjung Lee\*, Hyun Chul Lee, "Extension of Double Heterogeneity Treatment Method for Coated TRISO fuel particles," *Annals of Nuclear Energy*, Published Online. <http://dx.doi.org/10.1016/j.anucene.2016.07.026> (2017)

## **INTERNATIONAL TOPICAL MEETING**

1. Jiwon Choe, Minyong Park, Sooyoung Choi, Taewoo Tak, and Deokjung Lee\*, "Upgrade of Mode-K Strategy for Load-Follow Operation of OPR1000", *International Symposium on Symbiotic Nuclear Power Systems for the 21st Century (ISSNP2013)*, Beijing, China, November 22-24 (2013)

## **INTERNATIONAL AND DOMESTIC CONFERENCES**

1. Jiwon Choe, Sooyoung Choi, Minyong Park, Peng Zhang, Ho Cheol Shin, Hwan Soo Lee, Deokjung Lee\*, "Validation of the UNIST STREAM/RAST-K Code System with OPR -1000 Multi-cycle Operation", *RPHA17, Chengdu, Sichuan, China, August 24-25 (2017)* [Oral presentation]
2. Farrokh Khoshahval, Minyong Park, Ho Cheol Shin, Deokjung Lee\*, "Comparison of Direct Inversion Method and Kalman Filter for Detector Response Compensation", *RPHA17, Chengdu, Sichuan, China, August 24-25 (2017)* [Oral presentation]
3. Jinsu Park, Minyong Park, JiwonChoe, Peng Zhang, Jaerim Jang, Deok-jung Lee\*, "Development Status of Dynamic Reactor Nodal Computational Code RAST-K v2.0", *RPHA17, Chengdu, Sichuan, China, August 24-25 (2017)* [Oral presentation]
4. Farrokh Khoshahval, Minyong Park, Jinsu Park, Jiwon Choe, Peng Zhang, Ho Cheol Shin Shin, Ji Eun Jung, Hwan Soo Lee and Deokjung Lee\*, "SELF POWERED NEUTRON DETECTORS CALCULATIONS USING RAST-K 2.1," *37th Annual Conference of the Canadian Nuclear Society, Niagara Falls, ON, Canada, Jun 4-7 (2017)*
5. Seongpil Yum, Ho Cheol Shin, Minyong Park, Jiwon Choe, Peng Zhang, and Deokjung Lee\*, "Application of GMDH to Cross Section Functionalization," *M&C2017, Jeju, Korea, April 16-20 (2017)*
6. Seongpil Yum, Jaemin Kim, Minyong Park, Jiwon Choe, Peng Zhang, and Deokjung Lee and Ho Cheol Shin, "Accuracy Improvement of Axial Power Shape Reconstruction Using GMDH Algorithm," *KNS Fall Meeting, Gyeongju, Korea, October 26-28 (2016)*

7. **Minyong Park**, Youqi Zheng, Jiwon Choe, Eunke Lee, Ho Cheol Shin, Peng Zhang, and Deokjung Lee\*, "Development Status of Diffusion Code RAST-K 2.0 at UNIST," KNS Fall Meeting, Gyeongju, Korea, October 26-28 (2016)
8. Sooyoung Choi, Minyong Park, Youqi Zheng, Chidong Kong, Jiwon Choe, Hanjoo Kim, Kiho Kim, Ho Cheol Shin, and Deokjung Lee\*, "Development Status of Reactor Physics Code Suite in UNIST," Croatian Nuclear Society, Zadar, Croatia, June 5-8 (2016)
9. **Minyong Park**, Youqi Zheng, Eunke Lee, Ho Cheol Shin, and Deokjung Lee\*, "Verification of Depletion Module in RAST-K 2.0 for Shin-Kori Unit-3," KNS Spring Meeting, Jeju, Korea, May 11-13 (2016)
10. Youqi Zheng, Minyong Park, Deokjung Lee\*, Eunke Lee and Ho Cheol Shin, "Current developments of the PWR core analysis code RAST-K2.0," ICAPP2016, San Francisco, CA, USA, April 17-20 (2016)
11. Jiwon Choe, Chidong Kong, Sooyoung Choi, Minyong Park, Deokjung Lee, and Ho Cheol Shin, "Preliminary Analysis of New Secondary Shutdown System of Small Modular Pressurized Water Reactor," RPHA15, Jeju, Korea, September 16-18 (2015)
12. **Minyong Park**, Deokjung Lee\*, Eunke Lee, and Hyun Chul Lee, "Verification of Microscopic Depletion Module in RAST-K 2.0," KNS Spring Meeting, Jeju, May 6-8 (2015)
13. **Minyong Park**, Chidong Kong, Sooyoung Choi, Deokjung Lee\*, and Ho Cheol Shin, "Application of Macro-Micro Simulator for High School Student Training," Conference on Nuclear Training and Education 2015, Jacksonville, FL, February 1-4 (2015)
14. **Minyong Park**, Jiwon Choe, Deokjung Lee\*, and Eunke Lee, "Application of RAST-K to Simulation of OPR1000 Daily Load Follow Operation," KNS Fall Meeting, Pyeongchang, Korea, October 30-31 (2014)
15. Chidong Kong, Sooyoung Choi, Minyong Park, and Deokjung Lee\*, "Application of Nuclear Power Plant Simulator for High School Student Training," KNS Fall Meeting, Pyeongchang, Korea, October 30-31 (2014)
16. Jiwon Choe, Minyong Park, Sooyoung Choi, Taewoo Tak and Deokjung Lee\*, "Application of Mode-K Strategy to Daily Load-Follow Operation of OPR1000," ANS Winter Meeting, Washington D.C., USA, November (2013)

## PATENT