

CURRICULUM VITAE

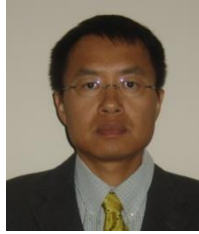
December 26, 2017

Deokjung Lee

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Home

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Office

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Ulsan National Institute of Science and
Technology
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EDUCATION

- 2000 ~ 2003 Ph.D., Nuclear Engineering, Purdue University, USA
1993 ~ 1994 M.S., Nuclear Engineering, Seoul National University, South Korea
1989 ~ 1992 B.S., Nuclear Engineering, Seoul National University, South Korea

PROFESSIONAL EXPERIENCE

- 2016 ~ Present Associate Professor
Nuclear Engineering, Ulsan National Institute of Science and Technology, South Korea
- 2011 ~ 2015 Assistant Professor
Nuclear Engineering, Ulsan National Institute of Science and Technology, South Korea
- 2009 ~ 2011 R&D Staff
Reactor Physics Group, Oak Ridge National Laboratory, USA
- 2005 ~ 2009 Senior Nuclear Engineer
Studsvik Scandpower, Inc., Idaho Falls, USA
- 2003 ~ 2004 Post-Doctoral Research Associate
Nuclear Engineering, Purdue University, Indiana, USA
- 1995 ~ 2000 R&D Staff
Reactor Core Analysis Group, Korea Electric Power Research Institute, South Korea

PROJECT FUNDING

| | |
|---|--------------------------|
| Total funding awarded: | 6,759,992,737 KRW |
| - 2011 ~ 2017 : | 4,440,971,873 KRW |
| Government funding | 3,574,242,736 KRW, |
| Industrial funding | 866,729,137 KRW |
| - 2018 ~ 2021 (Secured funding as of Nov. 2017) : | 2,319,020,864 KRW |
| Government funding | 1,336,750,000 KRW, |
| Industrial funding | 982,270,864 KRW |

STUDENT RESEARCH ADVISING

Theses Supervised (Total 3: 2 Ph.D. theses, 1 Master thesis)

Taewoo Tak, Ph.D., “Development of Ultra-long Cycle Small Modular Sodium-cooled Fast Reactor Core Concept” (2017.02)

Sooyoung Choi, Ph.D., “Pin-based Pointwise Energy Slowing-down Method for Resonance Self-shielding Calculation” (2017.02)

Jiwon Choe, Master, “New Burnable Absorber and Zirconium Reflector for Advanced PWRs” (2015.08)

Ph.D. Students (Total 14)

Hyunsuk Lee, *research topic : Monte Carlo code development, Monte Carlo acceleration*

Chidong Kong, *research topic : 2-term expansion of iterative RIT method in resonance treatment method*

Jiwon Choe, *research topic : generation of superhomogenization factor using PSM method*

Hanjoo Kim, *research topic : Multi-physics coupling between neutronics and thermal-hydraulics codes*

Bamidele Ebiwonjumi, *research topic : Spent fuel characterization and radiation source term calculation*

Wonkyeong Kim, *research topic : Sensitivity analysis and uncertainty quantification using Monte Carlo*

Jinsu Park, *research topic : High-fidelity depletion calculation & multi-physics nodal calculation*

Yunki Jo, *research topic : Generation of adjoint weight kinetics parameters in Monte Carlo*

Kiho Kim, *research topic : Library generation of lead-cooled fast reactor system*

Jaerim Jang, *research topic : 3D modeling of small modular reactor SMART and depletion calculation*

Nguyen Tung Dong Cao, *research topic : Design of lead-cooled fast reactor using Monte Carlo*

Nguyen Khang Hoang Nhat, *research topic : Depletion chain optimization*

Woonghee Lee, *research topic : Hexagonal solver development in Method of Characteristics*

Tuan Tran Quoc, *research topic : Shielding calculation in sodium-cooled fast reactor*

Master Students (Total 5)

Minyong Park, *research topic : 3D nodal transient code development*

Sanggeol Jeong, *research topic : Shielding calculation in sodium-cooled fast reactor*

Eun Jeong, *research topic : Kinetics parameter generation in lattice-physics code*

Azamat Khassenov, *research topic : On-the-fly Doppler broadening resonance interference factor*

Vutheam Dos, *research topic : Design of Jordan research reactor using Monte Carlo*

Undergraduate Students (Total 3)

Seongpil Yum, *research topic : GM data handling (GMDH) algorithm development*

Yongmin Jo, *research topic : Monte Carlo criticality validation of spent fuel cask design*

Junseon Bae, *research topic : OECD/NEA UAM benchmark calculation for LWRs*

POST-DOC ASSOCIATES

Dr. Peng Zhang, Tsinghua Univ. (China), **2014.12 ~ Present**, Research associate professor at UNIST

Dr. Matthieu Lemaire, Aix-Marseille Univ. (France), **2016.02 ~ Present**

Dr. Jiankai Yu, Tsinghua Univ. (China), **2016.07 ~ Present**

Dr. Sooyoung Choi, UNIST (Korea), **2017.03 ~ Present**

Dr. Youqi Zheng, Xi'an Jiaotong Univ. (China), **2015.08 ~ 2016.07**

Dr. Farrokh Khoshahval, Shahid Beheshti Univ. (Iran), **2016.09 ~ 2017.08**

PATENT

1. Deokjung Lee et. al., “Hybrid Depletion Method for LWR Analysis,” 10-2017-0059904, Korea (2017)
2. Deokjung Lee et. al., “Apparatus and Method for Reactor Core Analysis using PSM,” 10-2017-0054540, Korea (2017)
3. Deokjung Lee et. al., “Boron Meter,” 10-1462504 (2014. 11. 11), Korea (2014)
4. Deokjung Lee et. al., “Ultra-long Cycle Fast Reactor Using Spent Fuel,” 1020130009867, Korea (2013)

EDITORIAL BOARD FOR INTERNATIONAL JOURNAL (SCI)

Advisory Editor : Ann. Nucl. Energy

Associate Editor : J. Nucl. Sci. Technol.

TEACHING HISTORY (TOTAL 40 COURSES)

- **GRADUATE COURSES (Total 13 Courses)**

| Year | Semester | Course number | Course name |
|------|----------|---------------|--|
| 2017 | 2 | NUE50701 | Nuclear Reactor Dynamics |
| | 1 | NUE51401 | Nuclear Reactor Core Analysis II |
| 2016 | 1 | NUE51301 | Nuclear Reactor Core Analysis I |
| 2015 | 2 | NUE72901 | Special Topics in Nuclear Engineering V |
| | 1 | NUE51301 | Nuclear Reactor Core Analysis I |
| | | NUE60001 | Research Trends in Nuclear Engineering I |
| 2014 | 2 | NUE63901 | Special Topics in Nuclear Engineering II |
| | 1 | NUE50701 | Nuclear Reactor Dynamics |
| 2013 | 3 | NUE51401 | Nuclear Reactor Core Analysis II |
| | 2 | NUE51301 | Nuclear Reactor Core Analysis I |
| 2012 | 3 | NUE51701 | Nuclear Reactor Theory |
| | 1 | NUE51401 | Nuclear Reactor Core Analysis II |
| 2011 | 2 | NUE51301 | Nuclear Reactor Core Analysis I |

• **UNDERGRADUATE COURSES (Total 27 Courses)**

| Year | Semester | Course number | Course name |
|-------------|-----------------|----------------------|--|
| 2017 | 2 | NSE32401 | Nuclear Engineering Design and Lab II |
| | | NSE31101 | Introduction to Nuclear Reactor Theory |
| | | NSE48001 | Introduction to Nuclear Engineering IT |
| | 1 | NSE32601 | Nuclear Reactor Numerical Analysis |
| 2016 | 2 | NSE32401 | Nuclear Engineering Design and Lab II |
| | | NSE31101 | Introduction to Nuclear Reactor Theory |
| | | NSE48001 | Introduction to Nuclear Engineering IT |
| | 1 | NSE32601 | Nuclear Reactor Numerical Analysis |
| 2015 | 2 | NSE32401 | Nuclear Engineering Design and Lab II |
| | | NSE31101 | Introduction to Nuclear Reactor Theory |
| | | NSE48001 | Introduction to Nuclear Engineering IT |
| | 1 | NSE32601 | Nuclear Reactor Numerical Analysis |
| 2014 | 2 | NSE32401 | Nuclear Engineering Design and Lab II |
| | | NSE31101 | Introduction to Nuclear Reactor Theory |
| | | NSE48001 | Introduction to Nuclear Engineering IT |
| | 1 | NSE32601 | Nuclear Reactor Numerical Analysis |
| 2013 | 3 | NUE32401 | Nuclear Engineering Design and Lab II |
| | | NUE23101 | Introduction to Nuclear Reactor Theory |
| | 2 | NUE32401 | Nuclear Engineering Design and Lab II |
| | | NUE32601 | Nuclear Reactor Numerical Analysis |
| 2012 | 3 | NUE32401 | Nuclear Engineering Design and Lab II |
| | | NUE23101 | Introduction to Nuclear Reactor Theory |
| | 2 | NUE32401 | Nuclear Engineering Design and Lab II |
| | | NUE32601 | Nuclear Reactor Numerical Analysis |
| | | MTH10303 | Applied Linear Algebra (Green Energy) |
| 2011 | 2 | NUE32101 | Nuclear Engineering Design and Lab |
| | 1 | NUE21101 | Fundamentals of Nuclear Engineering I |

LEADERSHIP AND HONOR

- Nuclear Safety and Security Commission R&D Advisory Committee
- International Math and Computation Conference M&C2017 Organizing Committee
- International Reactor Physics Conference PHYSOR2016 Organizing Committee
- International Modelling and Simulation Conference ICMSNSE2015 Organizing Committee
- KNS award silver prize, 2014 Fall
- KNS award bronze prize, 2013 Fall
- KNS best poster award, 2013 Fall
- TPC Co-chair for PHYSOR2012 (International Topical Meeting on Reactor Physics), <http://physor2012.org/photo.html>
- Member of *Joint Benchmark Committee* of Mathematics and Computation, Reactor Physics, and Radiation Protection & Shielding, American Nuclear Society (2010 – 2013)
- Member of *Reactor Physics Division Program Committee* of American Nuclear Society, June 2008–2011
- Publication Committee, *PHYSOR 2004* (International Reactor Physics Conference), Chicago, IL
- Served as Judges for best paper awards and session chairs at ANS and international Conferences
- Member of American Nuclear Society
- *The Best Paper Award* at American Nuclear Society Winter Meeting, Washington, D.C., Nov. 2004
- *Outstanding NE Graduate Student*, Purdue University, Winter 2003
- Member of *Alpha Nu Sigma* Honor Society

PUBLICATIONS (5 Book Chapters, 55 SCIs, 219 Conference Papers)

Thesis

1. “Convergence Analysis of the Coarse Mesh Finite Difference Method,” *Ph.D. Thesis*, Nuclear Engineering, Purdue University, USA (2003)
2. “Three-dimensional Core Power Simulation Based on Incore Detector Signal,” *Master Thesis*, Nuclear Engineering, Seoul National University, South Korea (1995)

Book Chapters

1. Book chapter (Ch. 26.12: Worldwide activities, Korea), "Molten Salt Reactors and Thorium Energy," ISBN 978-0-081011260-3 (print), ISBN 978-0-08101243-7 (online), Woodhead publishing, Elsevier (2017)
2. Book chapter (Ch. 3: Theory of Nuclear Reactors), "Introduction to Nuclear Engineering (in English)" ISBN 979-11-85396-14-9 (2014)
3. Book chapter (Ch. 4: Nuclear Reactor Theory), "Introduction to Nuclear Engineering (in Korean)" ISBN 978-89-967541-4-5 (2012)
4. Book chapter (module 3), "Nuclear Reactor System Engineering," ISBN978-89-961580-5-9, Ulsan National Institute of Science and Technology (2011)
5. Rudolf Eigenmann et al., "OpenMP Shared Memory Parallel Programming," Lecture Notes in Computer Science, ISBN 3-540-42346-X, Springer (2001)

Refereed SCI Journals [h-index: 9, total times cited: 345, SCOPUS; h-index: 6, total times cited: 138, JCR]

1. Jaerim Jang, Wonkyeong Kim, Sanggeol Jeong, Eun Jung, Jinsu Park, Matthieu Lemaire, Hyunsuk Lee, and **Deokjung Lee****, "Validation of UNIST Monte Carlo Code MCS for Criticality Safety Analysis of PWR Spent Fuel Pool and Storage Cask, Ann. Nucl. Energy, accepted for publication (2018).
[times cited: 0, Rank 30.30%, IF: 1.312]
2. Jinsu Park, Tae Young Han, **Deokjung Lee**, and Hyun Chul Lee*, "VHTR Core Analysis of McCARD and DeCART with High Temperature Engineering Test Reactor Benchmark," Ann. Nucl. Energy, accepted for publication (2018).
[times cited: 0, Rank 30.30%, IF: 1.312]
3. 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," Ann. Nucl. Energy, 111: 644-659.
<https://doi.org/10.1016/j.anucene.2017.09.048> (2017)
[times cited: 0, Rank 30.30%, IF: 1.312]
4. Yunki Jo, Mathieu Hursin, **Deokjung Lee****, Hakim Ferroukhi, Andreas Pautz, "Analysis of Simplified BWR Full Core with SERPENT-2/SIMULATE-3 Hybrid Stochastic/Deterministic Code," Ann. Nucl. Energy, 111: 141-151.
<https://doi.org/10.1016/j.anucene.2017.08.061> (2017)
[times cited: 0, Rank 30.30%, IF: 1.312]
5. Chidong Kong, Ho Cheol Shin, and **Deokjung Lee****, "Lifetime Extension of In-Core Self-Powered Neutron Detector Using New Emitter Materials," **Int. J. Energ. Res.**, 41 (4): 2405-2412. <https://doi.org/10.1002/er.3817> (2017)

[times cited: 0, Rank 3.03%, L1, IF: 2.598]

6. Peng Zhang, Hyunsuk Lee, **Deokjung Lee****, "On the Transfer Matrix of the Modified Power Method," **Comput. Phys. Commun.**, 222: 102-112. <https://doi.org/10.1016/j.cpc.2017.09.022> (2017)
[times cited: 0, Rank 1.82%, L1, IF: 3.936]
7. Youqi Zheng, Sooyoung Choi, **Deokjung Lee****, "A New Approach to Three-Dimensional Neutron Transport Solution Based on the Method of Characteristics and Linear Axial Approximation," **J. Comput. Phys.**, 350: 25-44. <https://doi.org/10.1016/j.jcp.2017.08.026> (2017)
[times cited: 0, Rank 5.45%, L1, IF: 2.744]
8. Yunki Jo, Chidong Kong, Jiankai Yu, **Deokjung Lee****, Sihwan Kim, "High Accuracy Boronmeter Design Developed for Light Water Reactors," **Ann. Nucl. Energy**, 110: 25-30. <http://doi.org/10.1016/j.anucene.2017.06.013> (2017)
[times cited: 0, Rank 30.30%, IF: 1.312]
9. Peng Zhang, Hyunsuk Lee, **Deokjung Lee****, "Extension of the Noise Propagation Matrix Method for Higher Mode Solutions," **J. Comput. Phys.**, 344: 440-450. <http://dx.doi.org/10.1016/j.jcp.2017.05.007> (2017)
[times cited: 0, Rank 5.45%, L1, IF: 2.744]
10. Matthieu Lemaire, Hyunsuk Lee, Nam-il Tak, Hyun Chul Lee, **Deokjung Lee****, "Multi-physics steady state analysis of OECD/NEA Modular High Temperature Gas-cooled Reactor MHTGR-350," **J. Nucl. Sci. Technol.**, 54 (6):668-680. <http://dx.doi.org/10.1080/00223131.2017.1299649> (2017)
[times cited: 0, Rank 57.58%, IF: 0.965]
11. Sooyoung Choi, Kord Smith, Hanjoo Kim, Taewoo Tak, and **Deokjung Lee****, "On the Diffusion Coefficient Calculation in Two-step Light Water Reactor Core analysis," **J. Nucl. Sci. Technol.**, 54 (6): 705-715. <http://dx.doi.org/10.1080/00223131.2017.1299648> (2017)
[times cited: 0, Rank 57.58%, IF: 0.965]
12. Youqi Zheng, **Deokjung Lee****, Peng Zhang, Eunki Lee, Ho-cheol Shin, "Comparisons of SN and Monte-Carlo Methods in PWR Ex-core Detector Response Simulation," **Ann. Nucl. Energy**, 101: 139-150. <http://dx.doi.org/10.1016/j.anucene.2016.11.002> (2017)
[times cited: 0, Rank 30.30%, IF: 1.312]
13. Eun Jeong, Jiwon Choe, Peng Zhang, Ho Cheol Shin, **Deokjung Lee****, "New High Performance Light Water Reactor Core Concept with Mixed Cycle Length Operation," **Int. J. Energ. Res.**, Published Online. <http://dx.doi.org/10.1002/er.3738> (2017)
[times cited: 0, Rank 3.03%, L1, IF: 2.598]

14. Sooyoung Choi, Changho Lee, **Deokjung Lee****, "Resonance Treatment using Pin-Based Pointwise Energy Slowing-Down Method," **J. Comput. Phys.**, 330: 134-155. <http://dx.doi.org/10.1016/j.jcp.2016.11.007> (2017)
[times cited: 0, Rank 5.45%, L1, IF: 2.744]
15. Peng Zhang, Hyunsuk Lee, **Deokjung Lee****, "Calculation of Degenerated Eigenmodes with Modified Power Method," **Nucl. Eng. Tech.**, 49 (1): 17-28. <http://dx.doi.org/10.1016/j.net.2016.08.009> (2017)
[times cited: 1, Rank 45.45%, IF: 1.144]
16. Jinsu Park, Hyunsuk Lee, Taewoo Tak, Ho Cheol Shin, **Deokjung Lee****, "Physics Study of Canada Deuterium Uranium Lattice with Coolant Void Reactivity Analysis," **Nucl. Eng. Tech.**, 49 (1): 6-16.
<http://dx.doi.org/10.1016/j.net.2016.07.003> (2017)
[times cited: 0, Rank 45.45%, IF: 1.144]
17. Hanjoo Kim, Sooyoung Choi, Minyong Park, **Deokjung Lee****, Hyun Chul Lee, "Extension of Double Heterogeneity Treatment Method for Coated TRISO fuel particles," **Ann. Nucl. Energy**, 99: 124-135.
<http://dx.doi.org/10.1016/j.anucene.2016.07.026> (2017)
[times cited: 0, Rank 30.30%, IF: 1.312]
18. Jinsu Park, Taewoo Tak, T. K. Kim, Jiwon Choe, Yongjin Jeong, Peng Zhang, **Deokjung Lee****, "Design Study of Long-Life Small Modular Sodium-Cooled Fast Reactor," **Int. J. Energ. Res.**, 41 (1): 139-148.
<http://dx.doi.org/10.1002/er.3609> (2017)
[times cited: 0, Rank 3.03%, L1, IF: 2.598]
19. Jiwon Choe, Youqi Zheng, **Deokjung Lee****, Ho Cheol Shin, "Boron-Free Small Modular Pressurized Water Reactor Design with New Burnable Absorber," **Int. J. Energ. Res.**, 40 (15): 2128–2135. <http://dx.doi.org/10.1002/er.3590> (2016)
[times cited: 2, Rank 3.03%, L1, IF: 2.598]
20. Chidong Kong, Hyunsuk Lee, Taewoo Tak, **Deokjung Lee****, Si Hwan Kim, Seokjean Lyoo, "Accuracy Improvement of Boron Meter Adopting New Fitting Function and Multi-detector," **Nucl. Eng. Tech.**, 48 (6): 1360-1367.
<http://dx.doi.org/10.1016/j.net.2016.06.012> (2016)
[times cited: 1, Rank 45.45%, IF: 1.144]
21. Taewoo Tak, Youqi Zheng, **Deokjung Lee****, T. K. Kim, "Power Flattening Study of Ultra-Long Cycle Fast Reactor Using Thorium Fuel" **Int. J. Energ. Res.**, 40 (12): 1662–1672. <http://dx.doi.org/10.1002/er.3552> (2016)
[times cited: 0, Rank 3.03%, L1, IF: 2.598]
22. Peng Zhang, Hyunsuk Lee, **Deokjung Lee****, "Extension of Modified Power Method to Two-Dimensional Problems," **J. Comput. Phys.**, 320: 17-32. <http://dx.doi.org/10.1016/j.jcp.2016.05.024> (2016)

[times cited: 1, Rank 5.45%, L1, IF: 2.744]

23. Wonkyeong Kim, Hyun Chul Lee, Cheol Ho Pyeon, Ho Cheol Shin, **Deokjung Lee**** "Monte Carlo Analysis of the Accelerator-driven System at Kyoto University Research Reactor Institute," Nucl. Eng. Tech., 48 (2): 304-317. <http://dx.doi.org/10.1016/j.net.2015.12.001> (2016)
[times cited: 2, Rank 45.45%, IF: 1.144]
24. Jiwon Choe, **Deokjung Lee****, Ji-Eun Jeong, Ho Cheol Shin, "Performance Evaluation of Zircaloy Reflector for Pressurized Water Reactors," *Int. J. Energ. Res.*, 40 (2): 160-167. <http://dx.doi.org/10.1002/er.3443> (2016)
[times cited: 1, Rank 3.03%, L1, IF: 2.598]
25. Jiwon Choe, **Deokjung Lee****, Ho Cheol Shin, "New Burnable Absorber for Long-Cycle Low Boron Operation of PWRs," *Ann. Nucl. Energy*, 88: 272-279. <http://dx.doi.org/10.1016/j.anucene.2015.11.011> (2016)
[times cited: 3, Rank 30.30%, IF: 1.312]
26. Peng Zhang, Hyunsuk Lee, **Deokjung Lee**** "A General Solution Strategy of Modified Power Method for Higher Mode Solutions," *J. Comput. Phys.*, 305:387-402 <http://dx.doi.org/doi:10.1016/j.jcp.2015.10.042> (2016)
[times cited: 4, Rank 5.45%, L1, IF: 2.744]
27. Sooyoung Choi, Azamat Khassenov, **Deokjung Lee****, "Resonance Self-Shielding Method Using Resonance Interference Factor Library for Practical Lattice Physics Computations of LWRs," *J. Nucl. Sci. Technol.*, 53 (8): 1142-1154. <http://dx.doi.org/10.1080/00223131.2015.1095686> (2016)
[times cited: 1, Rank 57.58%, IF: 0.965]
28. Yongjin Jeong, Jinsu Park, Hyun Chul Lee, **Deokjung Lee****, "Equilibrium Core Design Methods for Molten Salt Breeder Reactor Based on Two-Cell Model," *J. Nucl. Sci. Technol.*, 53 (4): 529-536. <http://dx.doi.org/10.1080/00223131.2015.1062812> (2016)
[times cited: 1, Rank 57.58%, IF: 0.965]
29. Yongjin Jeong, Jinsu Park, Hyun Chul Lee, **Deokjung Lee**** "Convergence Analysis of Two-Node CMFD Method for Two-Group Neutron Diffusion Eigenvalue Problem," *J. Comput. Phys.*, 302:239-250 <http://dx.doi.org/10.1016/j.jcp.2015.09.004> (2015)
[times cited: 0, Rank 5.45%, L1, IF: 2.744]
30. Taewoo Tak, Jiwon Choe, Yongjin Jeong, **Deokjung Lee****, T.K. Kim, Ser Gi Hong, "Feasibility Study on Ultralong-Cycle Operation and Material Performance for Compact Liquid Metal-Cooled Fast Reactors: A Review Work," *Int. J. Energ. Res.*, 39 (14): 1859-1878. <http://onlinelibrary.wiley.com/doi/10.1002/er.3384/pdf> (2015)
[times cited: 7, Rank 3.03%, L1, IF: 2.598]

31. Jinsu Park, Yongjin Jeong, Hyun Chul Lee, **Deokjung Lee**** "Whole Core Analysis of Molten Salt Breeder Reactor with Online Fuel Reprocessing," **Int. J. Energ. Res.**, 39 (12): 1673-1680, <http://dx.doi.org/10.1002/er.3371> (2015)
[times cited: 3, Rank 3.03%, L1, IF: 2.598]
32. Sooyoung Choi, Kord Smith, Hyun Chul Lee, **Deokjung Lee****, "Impact of Inflow Transport Approximation on Light Water Reactor Analysis," **J. Comput. Phys.**, 299:352-373, <http://dx.doi.org/10.1016/j.jcp.2015.07.005> (2015)
[times cited: 3, Rank 5.45%, L1, IF: 2.744]
33. Wonkyeong Kim, Jinsu Park, Tomasz Kozlowski, Hyun Chul Lee, **Deokjung Lee****, "Comparative Neutronics Analysis of DIMPLE S06 Criticality Benchmark with Contemporary Reactor Core Analysis Computer Code Systems," **Sci. Technol. Nucl. Ins.**, 2015: 11, <http://dx.doi.org/10.1155/2015/180979> (2015)
[times cited: 1, Rank 81.82%, IF: 0.531]
34. Hyunsuk Lee, Sooyoung Choi, Kyoong-Ho Cha, Kwangho Lee, **Deokjung Lee****, "New Calculational Model for Self-Powered Neutron Detector Based on Monte Carlo Simulation," **J. Nucl. Sci. Technol.**, 52(5):660-669, <http://dx.doi.org/10.1080/00223131.2014.975766> (2015)
[times cited: 2, Rank 57.58%, IF: 0.965]
35. Mark L. Williams, Sooyoung Choi, **Deokjung Lee***, "A New Equivalence Theory Method for Treating Doubly Heterogeneous Fuel-I: Theory," **Nucl. Sci. Eng.**, 180 (1): 30-40, <http://dx.doi.org/10.13182/NSE14-68> (2015)
[times cited: 2, Rank 66.67%, IF: 0.822]
36. Sooyoung Choi, Chidong Kong, **Deokjung Lee****, Mark L. Williams, "A New Equivalence Theory Method for Treating Doubly Heterogeneous Fuel-II: Verifications," **Nucl. Sci. Eng.**, 180 (1): 41-57, <http://dx.doi.org/10.13182/NSE14-72> (2015)
[times cited: 2, Rank 66.67%, IF: 0.822]
37. Hyunsuk Lee, Sooyoung Choi, **Deokjung Lee****, "A Hybrid Monte Carlo/Method-of-Characteristics Method for Efficient Neutron Transport Analysis," **Nucl. Sci. Eng.**, 180 (1): 69-85, <http://dx.doi.org/10.13182/NSE13-102> (2015)
[times cited: 2, Rank 66.67%, IF: 0.822]
38. **Deokjung Lee***, T. Kozlowski, T.J. Downar, "Multi-Group SP3 Approximation for Simulation of A Three-Dimensional PWR Rod Ejection Accident," **Ann. Nucl. Energy**, 77: 94-100, <http://dx.doi.org/10.1016/j.anucene.2014.10.019> (2015)
[times cited: 2, Rank 30.30%, IF: 1.312]
39. Ser Gi Hong, **Deokjung Lee***, "Sub-cell Balanced Nodal Expansion Methods using S4 Eigenfunctions for Multi-group Sn Transport Problems in Slab Geometry," **J. Nucl. Sci. Technol.**, 52 (3): 315-331, <http://dx.doi.org/10.1080/00223131.2014.949892> (2015)
[times cited: 0, Rank 57.58%, IF: 0.965]

40. Sooyoung Choi, Hyunsuk Lee, Ser Gi Hong, **Deokjung Lee****, “Resonance Self-Shielding Methodology of New Neutron Transport Code STREAM,” J. Nucl. Sci. Technol., 52(9):1133-1150, <http://dx.doi.org/10.1080/00223131.2014.993738> (2015)
[times cited: 6, Rank 57.58%, IF: 0.965]
41. Taewoo Tak, **Deokjung Lee****, T.K. Kim, Ser Gi Hong, “Optimization Study for Ultra-long Cycle Fast Reactor Core Concept,” Ann. Nucl. Energy, 73: 145-161, <http://dx.doi.org/10.1016/j.anucene.2014.06.030> (2014)
[times cited: 5, Rank 30.30%, IF: 1.312]
42. Seongwoo Gwon, Myoungsu Shin, Benjamin Pimentel, **Deokjung Lee***, "Nonlinear Modeling Parameters of RC Coupling Beams in A Coupled Wall System," Earthq. Struct., 7 (5): 817-842, <http://dx.doi.org/10.12989/eas.2014.7.5.817> (2014) (IF: 1.138, Rank: 47/124)
[times cited: 0, Rank 61.60%, IF: 0.970]
43. Chidong Kong, **Deokjung Lee****, Eunki Lee, “Stability Improvement of Noise Analysis Method in case of Random Noise Contamination for Subcriticality Measurements,” Ann. Nucl. Energy, 71: 245-253, <http://dx.doi.org/10.1016/j.anucene.2014.04.013> (2014)
[times cited: 0, Rank 30.30%, IF: 1.312]
44. Min Jae Lee, Han Gyu Joo*, **Deokjung Lee**, Kord Smith, “Coarse Mesh Finite Difference Formulation for Accelerated Monte Carlo Eigenvalue Calculation,” Ann. Nucl. Energy, vol. 65: 101-113, <http://dx.doi.org/10.1016/j.anucene.2013.10.025> (2014)
[times cited: 9, Rank 30.30%, IF: 1.312]
45. Taewoo Tak, **Deokjung Lee****, T.K. Kim, “Design of Ultra-long Cycle Fast Reactor Employing Breed-and-burn Strategy,” Nucl. Tech., 183 (3): 427-435, http://www.ans.org/pubs/journals/nt/a_19430 (2013)
[times cited: 5, Rank 72.73%, IF: 0.745]
46. **Deokjung Lee***, “Impact of Dynamic Condensation of Energy Groups on Convergence Behavior of One-Node CMFD Method for Neutron Diffusion Problem,” Nucl. Sci. Eng., 174: 300-317, <http://dx.doi.org/10.13182/NSE12-27> (2013)
[times cited: 4, Rank 66.67%, IF: 0.822]
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Refereed Topical Meetings / Conferences

1. Tung Dong Cao Nguyen, Jiwon Choe and Deokjung Lee*, Assessment of Material Homogenization for Fast Reactor Design Using MCS and MC2/TWODANT/REBUS, KNS Autumn Meeting, Gyongju, Korea, October 25-27 (2017)
2. Jiankai Yu, Soojin Lee, Deokjung Lee*, Fuel Performance Coupling of FRAPCON within MCS, Transactions of the American Nuclear Society, Vol. 117, Washington, D.C., October 29–November 2 (2017)
3. Jinsu Park, Peng Zhang, Hyunsuk Lee, **Deokjung Lee***, “Performance Evaluation of CMFD on Inter-Cycle Correlation of Monte Carlo Simulation," RPHA17, Chengdu, Sichuan, China, August 24-25 (2017) [Oral presentation] RPHA 17 Best Student Papers Award
4. Khang Nguyen, JiwonChoe, Sooyoung Choi, Hyunsuk Lee, Wonkyeong Kim, **Deokjung Lee***, Matthieu Lemaire, “Verification of STREAM and MCS against OPR FA depletion calculation," RPHA17, Chengdu, Sichuan, China, August 24-25 (2017) [Oral presentation]
5. Matthieu Lemaire, Hyunsuk Lee, Bamidele Ebiwonjummi, ChidongKong, Wonkyeong Kim, Yunki Jo, Jinsu Park, **Deokjung Lee***, “Recent Work on Photon Transport with UNIST Monte Carlo Code MCS," RPHA17, Chengdu, Sichuan, China, August 24-25 (2017) [Oral presentation]
6. Chidong Kong, Hyunsuk Lee, Matthieu Lemaire, Wonkyeong Kim, Yunki Jo, Jinsu Park, JiwonChoe, Bamidele Ebiwonjumi, **Deokjung Lee***, “Introduction to UNIST Spent Nuclear Fuel Transportation Package Analysis Code System," RPHA17, Chengdu, Sichuan, China, August 24-25 (2017) [Oral presentation]
7. Vutheam Dos, Hyunsuk Lee, Yunki Jo, **Deokjung Lee***, Change Je Park, “Verification of MCS Model of the Jordan Research and Training Reactor for Neutronic Calculations," RPHA17, Chengdu, Sichuan, China, August 24-25 (2017) [Oral presentation]
8. Tung Dong Cao Nguyen, Hyunsek Lee, Jiwon Choe, Ho Choel Shin, Hwan Soo Lee, **Deokjung Lee***, “LPPT Analysis of APR1400 Reactor Core by UNIST Monte Carlo Code MCS," RPHA17, Chengdu, Sichuan, China, August 24-25 (2017) [Oral presentation]
9. 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]
10. Yum Seongpil, Ho Cheol Shin, Jiwon Choe, Peng Zhang, Farrokh Khoshahval, **Deokjung Lee***, “Application of GMDH to Cross Section Functionalization," RPHA17, Chengdu, Sichuan, China, August 24-25 (2017) [Oral presentation]

11. Azamat Khassenov, Jiankai Yu, Hyunsuk Lee, Peng Zhang, **Deokjung Lee***, "On the Window Multi-pole Library Generation," RPHA17, Chengdu, Sichuan, China, August 24-25 (2017) [Oral presentation]
12. Jiankai YU, Hyunsuk Lee, Hanjoo Kim, Peng Zhang, **Deokjung Lee***, "Preliminary Validation of MCS Multi-Physics Coupling Capability with CTF," RPHA17, Chengdu, Sichuan, China, August 24-25 (2017) [Oral presentation]
13. Eun Jeong, Sooyoung Choi, Ho Cheol Shin, Ji Eun Jeong, Hwan Soo Lee, **Deokjung Lee***, "Verification of Kinetics Parameters Calculation Capability in STREAM MOC Code," RPHA17, Chengdu, Sichuan, China, August 24-25 (2017) [Oral presentation]
14. 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]
15. Jaerim Jang, Jiwon Choe, Sooyoung Choi, Hyunsuk Lee, Bamidele Ebiwonjumi, Ho Cheol Shin, **Deokjung Lee***, "Boron-free SMPWR Analysis with MCS and STREAM codes," RPHA17, Chengdu, Sichuan, China, August 24-25 (2017) [Oral presentation]
16. Woonghee Lee, Sooyoung Choi, Bamidele Ebiwonjumi, Matthieu Lemaire, **Deokjung Lee***, "Implementation of On-The-Fly Energy Release per Fission Model in STREAM," RPHA17, Chengdu, Sichuan, China, August 24-25 (2017) [Oral presentation]
17. Jinsu Park, Minyong Park, Jiwon Choe, Peng Zhang, Jaerim Jang, **Deokjung Lee***, "Development Status of Dynamic Reactor Nodal Computational Code RAST-K v2.0," RPHA17, Chengdu, Sichuan, China, August 24-25 (2017) [Oral presentation]
18. Peng Zhang, Hyunsuk Lee, **Deokjung Lee***, "Prediction on Underestimation of Statistical Uncertainty for Fission Source Tally in Monte Carlo Simulation Based on the Modified Power Method," RPHA17, Chengdu, Sichuan, China, August 24-25 (2017) [Oral presentation]
19. Bamidele Ebiwonjumi, Sooyoung Choi, Matthieu Lemaire, **Deokjung Lee***, Ho Cheol Shin, "Experimental Validation of STREAM for Spent Nuclear Fuel Applications," RPHA17, Chengdu, Sichuan, China, August 24-25 (2017) [Oral presentation]
20. Sooyoung Choi, Jiwon Choe, Jaerim Jang, **Deokjung Lee***, "Extension of PSM for Ring-type Burnable Absorber Containing Resonant Nuclides," RPHA17, Chengdu, Sichuan, China, August 24-25 (2017) [Oral presentation] RPHA 17 Best Student Papers Award
21. Hyunsuk Lee, Eun Jeong, Hocheol Lee, Hyun Chul Lee, **Deokjung Lee***, "Verification of MCS VHTR Modeling Capability," RPHA17, Chengdu, Sichuan, China, August 24-25 (2017) [Oral presentation]

22. Jiankai Yu, Hyunsuk Lee, Khassenov Azamat, Kan Wang and **Deokjung Lee***, "PERFORMANCE OF ON-THE-FLY CROSS SECTIONS PROCESSING IN MONTE CARLO SIMULATION CODE," 37th Annual Conference of the Canadian Nuclear Society, Niagara Falls, ON, Canada, Jun 4-7 (2017)
23. 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)
24. Farrokh Khoshahval and **Deokjung Lee***, "SELECTION OF OBJECTIVE FUNCTIONS IN THE MULTI-OBJECTIVE FUEL MANAGEMENT OPTIMIZATION," 37th Annual Conference of the Canadian Nuclear Society, Niagara Falls, ON, Canada, Jun 4-7 (2017)
25. Jiwon Choe, Ho Cheol Shin, Ji Eun Jung, Hwan Soo Lee and **Deokjung Lee***, "CYCLE LENGTH EXTENSION OF SMPWR USING ZIRCALOY REFLECTOR," 37th Annual Conference of the Canadian Nuclear Society, Niagara Falls, ON, Canada, Jun 4-7 (2017)
26. Sanggeol Jeong, Jaerim Jang, Wonkyeong Kim, Azamat Khassenov, **Deokjung Lee***, "Evaluation of NUREG/CR-6361 and NUREG/CR-6698 Methodologies of PWR Spent Fuel Pool and Storage Cask," KNS Spring Meeting, Jeju, Korea, May 17-19 (2017) [Poster Presentation]
27. Seongpil Yum, Jiwon Choe, Sooyoung Choi, **Deokjung Lee***, "Pin-by-pin Core Calculation with SPH Factor for Improving Accuracy of Pinwise Calculation," KNS Spring Meeting, Jeju, Korea, May 17-19 (2017) [Poster Presentation]
28. Eun Jeong, Jinsu Park, Hyun Chul Lee, and **Deokjung Lee***, "Verification of DeCART/CAPP Code System for VHTR Core with PMR-200 Benchmark," ICAPP2017, Kyoto, Japan, April 24-28 (2017) [Oral Presentation]
29. Hyunsuk Lee, Wonkyeong Kim, Peng Zhang, Azamat Khassenov, Jinsu Park, Jiankai Yu, Sooyoung Choi, Hwan Soo Lee and **Deokjung Lee***, "Preliminary Simulation Results of BEAVRS Three-dimensional Cycle 1 Wholecore Depletion by UNIST Monte Carlo Code MCS," M&C2017, Jeju, Korea, April 16-20 (2017) [Oral Presentation]
30. Matthieu Lemaire, Hyunsuk Lee, Nam-il Tak, Hyun-Chul Lee, **Deokjung Lee***, "Monte Carlo Thermal-Fluids Coupled Calculations for MHTGR-350MW Benchmark," M&C2017, Jeju, Korea, April 16-20 (2017) [Oral Presentation]
31. Peng Zhang, Hyunsuk Lee, **Deokjung Lee**, "A New Accumulation Scheme for the Monte Carlo Implementation of the Modified Power Method," M&C2017, Jeju, Korea, April 16-20 (2017) [Oral Presentation]
32. Wonkyeong Kim, Hyunsuk Lee, Sooyoung Choi, Ji-Eun Jung and **Deokjung Lee***, "Hybrid Depletion Method for the Light Water Reactor analysis," M&C2017, Jeju, Korea, April 16-20 (2017) [Oral Presentation]
33. Jinsu Park, Tae Yong Han, Hyun Chul Lee*, **Deokjung Lee**, "Validation of McCARD for VHTR core with HTTR Benchmark," M&C2017, Jeju, Korea, April 16-20 (2017) [Poster Presentation]

34. Peng Zhang, Hyunsuk Lee, **Deokjung Lee**, "Monte Carlo Higher Modes Calculation based on the Extension of the Noise Propagation Matrix," M&C, Jeju, Korea, April 16-20 (2017) [Oral Presentation]
35. Sanggeol Jeong, Ian Hill, Hiroshi Kikusato, and **Deokjung Lee*** (poster), "Creation of a Database of Uncertainties for ICSBEP Handbook and Tool for Covariance Generation," M&C2017, Jeju, Korea, April 16-20 (2017) [Poster Presentation]
36. Jiankai YU, Azamat Khassenov, Peng Zhang, **Deokjung Lee***, "On the Convergence Issue for Multi-Poles Conversion from Reich-Moore Formalism," M&C2017, Jeju, Korea, April 16-20 (2017) [Oral Presentation]
37. Bamidele Ebiwonjumi, Sooyoung Choi, **Deokjung Lee***, Ho Cheol Shin, "Verification and Validation of STREAM Source Term Calculation Capability," M&C2017, Jeju, Korea, April 16-20 (2017) [Oral Presentation]
38. 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) [Poster Presentation]
39. Eun Jeong, Jiwon Choe, and **Deokjung Lee**, Ho Cheol Shin, "Impact of Erbia in Long Cycle Operation of PWR," KNS Fall Meeting, Gyeongju, Korea, October 26-28 (2016)
40. Minyong Park, **Deokjung Lee**, Jiwon Choe, and Peng Zhang, Hocheol Shin and Eunki Lee, Youqi Zheng, "Development Status of Diffusion Code RAST-K 2.0 at UNIST," KNS Fall Meeting, Gyeongju, Korea, October 26-28 (2016)
41. Seongpil Yum, Jaemin Kim, Minyong Park, Jiwon Choe, Peng Zhang, and **Deokjung Lee**, Ho Cheol Shin, "Accuracy Improvement of Axial Power Shape Reconstruction Using GMDH Algorithm," KNS Fall Meeting, Gyeongju, Korea, October 26-28 (2016)
42. Youqi Zheng, Sooyoung Choi, and **Deokjung Lee**, "New Three-Dimensional Neutron Transport Calculation Capability in STREAM Code," KNS Fall Meeting, Gyeongju, Korea, October 26-28 (2016)
43. Peng ZHANG, Hyunsuk LEE, and **Deokjung LEE**, "Extension of NPMM for Higher Mode Solutions," KNS Fall Meeting, Gyeongju, Korea, October 26-28 (2016)
44. Jiankai YU, Peng ZHANG, and **Deokjung Lee**, Kan WANG, "Validation of R-Matrix Limited Based Reconstruction Capability for RXSP Code," KNS Fall Meeting, Gyeongju, Korea, October 26-28 (2016)
45. Sooyoung Choi, Jiwon Choe, and **Deokjung Lee**, "Incorporation of Collision Probability Method in STREAM to Consider Non-uniform Material Composition in Fuel Subregions," KNS Fall Meeting, Gyeongju, Korea, October 26-28 (2016)
46. Hyunsuk Lee, **Deokjung Lee**, Peng Zhang, and Azamat Khassenov, "Preliminary Solution of BEAVRS Hot Full Power at BOC by Monte Carlo Code" KNS Fall Meeting, Gyeongju, Korea, October 26-28 (2016)

47. Ho Cheol Shin, Eun Jeong, Jiwon Choe, and **Deokjung Lee**, "Impact of UO₂ Enrichment of Fuel Zoning Rods in Long Cycle Operation of PWR" KNS Fall Meeting, Gyeongju, Korea, October 26-28 (2016)
48. Jinsu Park, Wonkyeong Kim, Sooyoung Choi, Hyunsuk Lee, and **Deokjung Lee**, "Comparative Analysis of VERA Depletion Problems," KNS Fall Meeting, Gyeongju, Korea, October 26-28 (2016)
49. Matthieu Lemaire, Hyunsuk Lee, and **Deokjung Lee**, Nam-il Tak, Hyun Chul Lee, "MHTGR-350 Coupled Steady-State Results Using MCS and GAMMA+," KNS Fall Meeting, Gyeongju, Korea, October 26-28 (2016)
50. Taewoo Tak, Jinsu Park, Jiwon Choe, and **Deokjung Lee**, Thomas. H. Fanning, Tyler Sumner, Guanheng Zhang, and T. K. Kim, "Anticipated Transient without Scram Assessment at EOC of SM-SFR Using SAS4A/SASSYS-1," KNS Fall Meeting, Gyeongju, Korea, October 26-28 (2016)
51. Oyeon Kum, **Deokjung Lee**, "Flushing Water Contamination in Different Concrete Models for PSA Level 3 Severe Accident Scenario," 13th International Conference on Probabilistic Safety Assessment and Management (PASM 13), Seoul, Korea, October 2-7 (2016)
52. Oyeon Kum, **Deokjung Lee**, "Important Model Parameters for Analyzing Activation Effects in Accident Scenarios for Heavy-ion Medical Accelerator Facility," 13th International Conference on Probabilistic Safety Assessment and Management (PASM 13), Seoul, Korea, October 2-7 (2016)
53. Jiwon Choe, Ho Cheol Shin, Ji-Eun Jeong, **Deokjung Lee***, "Cutback Sensitivity Test for Boron-Free Small Modular PWR," 2016 International Conference on New Energy and Future Energy System (NEFES2016), Beijing, China, August 19-22 (2016)
54. Chidong Kong, Hyunsuk Lee, Si Hwan Kim, Seokjean Lyou, **Deokjung Lee***, "Development of High Accuracy Boron Meter," International Conference on Advanced Technology Innovation 2016(ICATI 2016), Bali, Indonesia, June 30-July 3 (2016)
55. 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)
56. Heereyoung Kim, and **Deokjung Lee**, "The Dose Calculation on Graphite Waste Samples of the Decommissioned KRR-2," 14th International Congress of the International Radiation Protection Association(IRPA2016), Cape Town, South Africa, May 9-13 (2016)
57. Jiwon Choe, Youqi Zheng, Taewoo Tak, and **Deokjung Lee**, Ho Cheol Shin and Ji-Eun Jung, "Axial Region Optimization for Cycle Length Extension of Small Modular PWR," KNS 2016 spring, Jeju, Korea, May 11-13 (2016)
58. Jinsu Park, Hyunsuk Lee, Taewoo Tak, and **Deokjung Lee**, "Coolant Void Reactivity Analysis of CANDU Lattice," KNS 2016 spring, Jeju, Korea, May 11-13 (2016)

59. Chidong Kong, Hyunsuk Lee, and **Deokjung Lee**, Ho Cheol Shin and Kyoong-Ho Cha, "Feasibility Study of Silver as Emitter of In-core Neutron Detector," KNS 2016 spring, Jeju, Korea, May 11-13 (2016)
60. Wonkyeong Kim and **Deokjung Lee**, Frederik Reitsma, "MHTGR-350MW Cross-section Uncertainty Analysis for Exercise I on UAM Benchmark," KNS 2016 spring, Jeju, Korea, May 11-13 (2016)
61. Hanjoo Kim, Sooyoung Choi, and **Deokjung Lee**, Hyun Chul Lee, "Extension of STREAM Double Heterogeneity Method to Coated TRISO Particles," KNS 2016 spring, Jeju, Korea, May 11-13 (2016)
62. Hyunsuk Lee, Wonkyeong 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)
63. Peng Zhang, Hyunsuk Lee, and **Deokjung Lee**, "Application of the Modified Power Method to 2D Core Simulation," KNS 2016 spring, Jeju, Korea, May 11-13 (2016)
64. Sooyoung Choi and **Deokjung Lee**, Changho Lee, "Enhanced Resonance Self-shielding Method in Lattice Physics Code STREAM," KNS 2016 spring, Jeju, Korea, May 11-13 (2016)
65. Jiwon Choe, Ho Cheol Shin, **Deokjung Lee***, "Optimal Control Rod for Boron-Free Small Modular PWR," PBNC 2016, Beijing, China, April 5-9 (2016)
66. Jinsu Park, Hyunsuk Lee, **Deokjung Lee***, "Optimization of CANDU Lattice Design for Negative Coolant Void Reactivity," PBNC 2016, Beijing, China, April 5-9 (2016)
67. Peng Zhang, Hyunsuk Lee, and **Deokjung Lee***, "Extension of Modified Power Method to Multi-Dimensional Monte Carlo Simulations," PHYSOR2016, Sun Valley, ID, USA, May 1-5 (2016)
68. Peng Zhang, Hyunsuk Lee, and **Deokjung Lee***, "On the Characteristics of Transfer Matrix of Generalized Modified Power Method," PHYSOR2016, Sun Valley, ID, USA, May 1-5 (2016)
69. Jinsu Park, Taewoo Tak, Jiwon Choe, Yongjin Jeong, **Deokjung Lee***, and T. K. Kim, "Long-Life Small Modular Sodium-Cooled Fast Reactor Core Design with Breed-and-Burn Strategy," PHYSOR2016, Sun Valley, ID, USA, May 1-5 (2016)
70. Wonkyeong Kim, Frederik Reitsma, and **Deokjung Lee***, "IAEA Coordinated Research Program on HTGR Uncertainty Analysis: Results of Exercise I-1c and I-1d Model and the Application of RPT Method," PHYSOR2016, Sun Valley, ID, USA, May 1-5 (2016)
71. Jiwon Choe, **Deokjung Lee**, and Ho Cheol Shin, "Preliminary Design of Boron-Free Small Modular Pressurized Water Reactor," PHYSOR2016, Sun Valley, ID, USA, May 1-5 (2016)
72. Sooyoung Choi, Changho Lee, and **Deokjung Lee***, "Improved Resonance Self-shielding Method Considering Resonance Scattering Effect," PHYSOR2016, Idaho, USA, May 1-5 (2016)

73. Sooyoung Choi, Kord Smith, and **Deokjung Lee***, "Investigation of Diffusion Coefficient Calculation Methods for Two-Step LWR Analysis," PHYSOR2016, Idaho, USA, May 1-5 (2016)
74. Yunki Jo and **Deokjung Lee**, "Verification of Adjoint-Weighted Kinetics Parameter Calculation Capacity in MCS," PHYSOR2016, Sun Valley, ID, USA, May 1-5 (2016)
75. Hanjoo Kim, Kiho Kim, Sooyoung Choi, Hyunsuk Lee, and **Deokjung Lee**, "Analysis of NCA Tungsten Critical Experiment by New Monte Carlo Code," PHYSOR2016, Sun Valley, ID, USA, May 1-5 (2016)
76. Chidong Kong, Hyunsuk Lee, Si Hwan Kim, Seokjean Lyou, and **Deokjung Lee***, "Optimization of Boron Meter Model" ICAPP2016, San Francisco, CA, USA, April 17-20 (2016)
77. Youqi Zheng, **Deokjung Lee***, Peng Zhang, Eunki Lee, Ho Cheol Shin, "Ex-core detector response evaluation of Kori 1 reactor using MCNP6 adjoint calculation" ICAPP2016, San Francisco, CA, USA, April 17-20 (2016)
78. Youqi Zheng, Minyong Park, **Deokjung Lee***, Eunki Lee, Ho Cheol Shin, "Current developments of the PWR core analysis code RAST-K2.0" ICAPP2016, San Francisco, CA, USA, April 17-20 (2016)
79. Hyunsuk Lee, Azamat Khassenov, Peng Zhang, and **Deokjung Lee***, "Computational Approaches to Large-scale/complex Nuclear Reactor Analysis," CPMMS2016, Bangkok, Thailand, January 24-26 (2016)
80. Peng Zhang, Hyunsuk Lee, and **Deokjung Lee***, "A Monte Carlo Convergence Acceleration Technique based on the Modified Power Method," SMMS2015, Chiang Mai, Thailand, November 22-23 (2015)
81. Chidong Kong, Hyunsuk Lee, Si Hwan Kim, Seokjean Lyou, and **Deokjung Lee***, "Sensitivity Evaluation of Boron Meter Model," KNS Fall Meeting, Gyeongju, Korea, October 29-30 (2015)
82. **Deokjung Lee**, Sooyoung Choi, and Kord Smith, "On the Diffusion Coefficient of Two-Step Method for LWR Analysis," KNS Fall Meeting, Gyeongju, Korea, October 29-30 (2015)
83. Taewoo Tak, Jiwon Choe, Yongjin Jeong, Jinsu Park, **Deokjung Lee***, and T. K. Kim, "Power Flattening Study of Ultra-Long Cycle Fast Reactor Core," Thorium Energy Conference 2015 (ThEC15), Mumbai, India, October 19-22 (2015)
84. Azamat Khassenov, Sooyoung Choi, Hyunsuk Lee, Peng Zhang, Youqi Zheng, and **Deokjung Lee***, "Preliminary Performance Evaluation of On-the-Fly Doppler Broadening Capability for Monte Carlo Simulation in MCS," 7ICMSNSE, Ottawa, Canada, October 18-21 (2015)
85. Peng Zhang, Hyunsuk Lee, Kyoon-Ho Cha, Sun-Kwan Hong, and **Deokjung Lee***, "Application of Modified Power Method to 2D Problems," RPHA15, Jeju, Korea, September 16-18 (2015)
86. Chidong Kong, Hyunsuk Lee, Si Hwan Kim, Seokjean Lyou, and **Deokjung Lee***, "Application of Rational Function for Accuracy Improvement of Boron Meter Model," RPHA15, Jeju, Korea, September 16-18 (2015)

87. Jinsu Park, Taewoo Tak, Jiwon Choe, Yongjin Jeong, **Deokjung Lee***, and T. K. Kim, "Comparison of Predicted Breed-and-Burn Evaluation of a Small Modular Sodium-Cooled Fast Reactor with Several Code Systems," RPHA15, Jeju, Korea, September 16-18 (2015)
88. Yongjin Jeong, Sooyoung Choi, Hyunsuk Lee, Kyoong-Ho Cha, Sun-Kwan Hong, and **Deokjung Lee***, "Hybrid Depletion Method for Monte Carlo Analysis of PWRs," RPHA15, Jeju, Korea, September 16-18 (2015)
89. Kiho Kim, Hanjoo Kim, Sooyoung Choi, Hyunsuk Lee, and **Deokjung Lee**, "Benchmark Analysis of NCA Tungsten Critical Experiment," RPHA15, Jeju, Korea, September 16-18 (2015)
90. 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)
91. Taewoo Tak, Jiwon Choe, Yongjin Jeong, **Deokjung Lee***, and T. K. Kim, "Study for Requirement of Advanced Long Life Small Modular Fast Reactor," iNuSTEC2015, Nilai, Malaysia, August 17-19 (2015)
92. Yongjin Jeong, Jinsu Park, **Deokjung Lee***, and Hyun Chul Lee, "Convergence Analysis of Two-Node CMFD Method Applied to Neutron Diffusion Eigenvalue Problem," 2015 ANS Annual Meeting, San Antonio, TX, June 7-11 (2015)
93. Yongjin Jeong, Jinsu Park, and **Deokjung Lee***, "Advanced Equilibrium Composition Search Method for Molten Salt Breeder Reactor Based on Two-Cell Model," 2015 ANS Annual Meeting, San Antonio, TX, June 7-11 (2015)
94. Taewoo Tak, and **Deokjung Lee***, "Study on Burning Strategy for Small-Size Sodium-Cooled Fast Reactor," 2015 ANS Annual Meeting, San Antonio, TX, June 7-11 (2015)
95. Peng Zhang, Hyunsuk Lee, and **Deokjung Lee***, "The Implementation of Modified Power Iteration Method in Monte Carlo," 2015 ANS Annual Meeting, San Antonio, TX, June 7-11 (2015)
96. Jiwon Choe, **Deokjung Lee***, and Ho Cheol Shin, "Performance Evaluation of Alternative Reflector Materials for PWRs," 2015 ANS Annual Meeting, San Antonio, TX, June 7-11 (2015)
97. Jiwon Choe, **Deokjung Lee***, and Ho Cheol Shin, "New Ring Type Burnable Absorber for PWRs," 2015 ANS Annual Meeting, San Antonio, TX, June 7-11 (2015)
98. Chidong Kong, Jiwon Choe, Ho Cheol Shin, and **Deokjung Lee***, "Impact of Isotope Separation on Burnable Absorber Performance," 2015 ANS Annual Meeting, San Antonio, TX, June 7-11 (2015)
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100. Sooyoung Choi and **Deokjung Lee**, Recent Developments of Lattice Physics Code STREAM, KNS Spring Meeting, Jeju, Korea, May 6-8 (2015)

101. Peng Zhang, Hyunsuk Lee, and **Deokjung Lee**, Extension of Tom Booth's Modified Power Method for Higher Eigen Modes, KNS Spring Meeting, Jeju, Korea, May 6-8 (2015)
102. Azamat Khassenov, Sooyoung Choi, and **Deokjung Lee**, On the Fly Doppler Broadening Using Multipole Representation, KNS Spring Meeting, Jeju, Korea, May 6-8 (2015)
103. Yongjin Jeong, Jinsu Park, **Deokjung Lee** and Hyun Chul Lee, Convergence Analysis of Two-Node CMFD Method for TWO-Group Neutron Diffusion Eigenvalue Problem, KNS Spring Meeting, Jeju, Korea, May 6-8 (2015)
104. Taewoo Tak, Jiwon Choe, Yongjin Jeong, **Deokjung Lee** and T. K. Kim, Preliminary Study for Conceptual Design of Advanced Long Life Small Modular Fast Reactor, KNS Spring Meeting, Jeju, Korea, May 6-8 (2015)
105. Minyong Park, **Deokjung Lee** and Eunki Lee, Verification of Microscopic Depletion Module in RAST-K 2.0, KNS Spring Meeting, Jeju, Korea, May 6-8 (2015)
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108. Jinsu Park, Yongjin Jeong, and **Deokjung Lee**, Molten Salt Breeder Reactor Analysis Methods, KNS Spring Meeting, Jeju, Korea, May 6-8 (2015)
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110. Yunki Jo and **Deokjung Lee**, Implementation of Adjoint-weighted Kinetics Parameter Calculation in MCS, KNS Spring Meeting, Jeju, Korea, May 6-8 (2015)
111. Hyunsuk Lee and **Deokjung Lee**, Performance Evaluation of CMFD with Superhistory Method on Continuous Energy Monte Carlo Eigenvalue Simulation, KNS Spring Meeting, Jeju, Korea, May 6-8 (2015)
112. Wonkyeong Kim and **Deokjung Lee**, Benchmark analysis for ADS KUCA experiment: Reactivity and Indium wire reaction rate, KNS Spring Meeting, Jeju, Korea, May 6-8 (2015)
113. Jinsu Park and **Deokjung Lee**, Effect of Energy Groups and Dimensions on Convergence behavior of 2-N CMFD Method, KNS Spring Meeting, Jeju, Korea, May 6-8 (2015)
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117. Hyunsuk Lee, and **Deokjung Lee***, "Application of CMFD with Wielandt Method on Continuous Energy Monte Carlo Simulation for Eigenvalue Problems," ANS MC2015, Nashville, TN, USA, April 19-23 (2015)
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119. Sooyoung Choi, Kord Smith, and **Deokjung Lee***, "Impact of Inflow Transport Approximation on Reactor Analysis," ANS MC2015, Nashville, TN, USA, April 19-23 (2015)
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121. Jinsu Park, Yongjin Jeong, and **Deokjung Lee***, "Whole Core Analysis of Molten Salt Breeder Reactor," Advances in Nuclear Fuel Management V, Hilton Head, SC, March 29-April 1 (2015)
122. 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)
123. Sooyoung Choi, Chidong Kong, Azamat Khassenov, and **Deokjung Lee***, "Methodology and Verification of Neutron Transport Code STREAM for Analysis of Innovative Reactor Core Design," International Symposium on NPP Technology and HRD, Busan, Korea, November (2014) [Oral Presentation]
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125. Jiwon Choe, Taewoo Tak, Yongjin Jeong, **Deokjung Lee**, and Taek Kyum Kim, "The Impact Of Thorium Blanket On Long-Life Fast Reactor Core Performance Characteristics," ANUP 2014, Jeju Island, Korea, November 9-12 (2014) [Oral Presentation]
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136. Hyunsuk Lee, Chidong Kong, and **Deokjung Lee***, “Status of Monte Carlo Code Development at UNIST,” PHYSOR2014, Kyoto, Japan, September 28 ? October 3 (2014) [Oral Presentation]
137. Sooyoung Choi, **Deokjung Lee***, and Mark L. Williams, “Verification of Doubly-Heterogeneous Self-shielding Method Based on Equivalence Theory,” PHYSOR2014, Kyoto, Japan, September 28 ? October 3 (2014) [Oral Presentation]
138. Chidong Kong, Sooyoung Choi, and **Deokjung Lee***, “Deterministic Lattice Code Development at UNIST,” PHYSOR2014, Kyoto, Japan, September 28 ? October 3 (2014) [Poster Presentation]
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148. LEE Hyunsuk, CHOI Sooyoung, KIM Si Hwan, LYOU Seokjean, and LEE Deokjung *, “Development of MCNPX Model for Boronometer,” International Symposium on Symbiotic Nuclear Power Systems for the 21st Century (ISSNP2013), November 22-24, Beijing, China (2013) [Oral Presentation]
149. CHOE Jiwon, PARK Minyong, CHOI Sooyoung, TAK Taewoo, and LEE Deokjung *, “Upgrade of Mode-K Strategy for Load-Follow Operation of OPR1000,” International Symposium on Symbiotic Nuclear Power Systems for the 21st Century (ISSNP2013), November 22-24, Beijing, China (2013) [Oral Presentation]
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155. Taewoo Tak, Jiwon Choe, Hyunsuk Lee and **Deokjung Lee***, “Verification of UCFR-100 Depletion Calculation with Deterministic Method by Comparing with Probabilistic Method,” ANS Winter Meeting, Washington D.C., November (2013) [Oral Presentation]
156. Chidong Kong, Eunki Lee, and **Deokjung Lee***, “Incorporation of Random Noise into Rossi-alpha Technique,” ANS Winter Meeting, Washington D.C., November (2013) [Oral Presentation]
157. Hyunsuk Lee and **Deokjung Lee***, “Application of Analytic Slowingdown Kernel for MOC-MC Hybrid Method,” ANS Winter Meeting, Washington D.C., November (2013) [Oral Presentation]
158. Hyunsuk Lee, Si Hwan Kim, Seokjean Lyou, and **Deokjung Lee ***, “Performance Evaluation of Boronmeter based on MCNPX Model,” ANS Winter Meeting, Washington D.C., November (2013) [Oral Presentation]
159. 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., November (2013) [Oral Presentation]
160. Sooyoung Choi and **Deokjung Lee***, “On the Fuel Escape Probability Approximation of Equivalence Theory,” ANS Winter Meeting, Washington D.C., November (2013) [Oral Presentation]
161. Hyunsuk Lee, Chidong Kong, Sooyoung Choi, and **Deokjung Lee ***, “Hybrid Method of MOC and MC for Efficient Continuous Energy Neutron Transport Analysis,” ANS Annual Meeting, Atlanta, GA, June (2013) [Oral Presentation]
162. Taewoo Tak and **Deokjung Lee***, “Power Flattening Study for Ultra-long Cycle Fast Reactor UCFR-1000,” ANS Annual Meeting, Atlanta, GA, June (2013) [Oral Presentation]
163. Chidong Kong, Eunki Lee, and **Deokjung Lee***, “Performance Evaluation of Power Spectral Density Method for Subcriticality Monitoring of Model Reactor Problem,” ” KNS Spring Meeting, Gwangju, Korea, May 29-31 (2013) [Oral Presentation]
164. Hyunsuk Lee and **Deokjung Lee ***, “Hybrid Method of Deterministic and Probabilistic Approaches for Continuous Energy Neutron Transport Problem,” M&C2013, Sun Valley, USA, May (2013) [Oral Presentation]
165. Chidong Kong, **Deokjung Lee***, and Eunki Lee, “Feasibility Study of Noise Analysis Methods on Virtual Thermal Reactor Subcriticality Monitoring,” M&C2013, Sun Valley, USA, May 5-9 (2013) [Oral Presentation]

166. Taewoo Tak, **Deokjung Lee***, T.K. Kim, “Core Design Study of Ultra-long Cycle Fast Reactor Concept,” FR-13, Paris, France, March (2013) [Oral Presentation]
167. Taewoo Tak, **Deokjung Lee***, “Design of Small-size Ultra-long Cycle Fast Reactor with PWR Spent Fuel,” ICAPP2013, Jeju, South Korea, April (2013) [Oral Presentation]
168. Chidong Kong, Eunki Lee, **Deokjung Lee***, “Feasibility Study on Continuous Monitoring of Subcriticality by Noise Analysis Methods,” ICAPP2013, Jeju, South Korea, April 14-18 (2013) [Oral Presentation]
169. Jiwon Choe, Kyeong Ju Lee, **Deokjung Lee***, “Feasibility Study of Load Follow Operation for OPR1000,” ICAPP2013, Jeju, South Korea, April (2013) [Poster Presentation]
170. Kyeongju Lee, Jiwon Choe, and **Deokjung Lee***, “Application of Load Follow Operation to Equilibrium Cycle of OPR1000,” KNS Autumn Meeting, Gyeongju, Korea, October 25-26 (2012) [Oral Presentation]
171. Taewoo Tak, **Deokjung Lee***, “A Study for Verifying Dynamic Characteristics of UCFR-1000 by Testing a Fuel Assembly,” KNS Autumn Meeting, Gyeongju, Korea, October 25-26 (2012) [Oral Presentation]
172. Tae Woo Tak and **Deokjung Lee***, “Design of Small-size Ultra-long Cycle Fast Reactor UCFR-100,” ANS Winter Meeting, San Diego, CA (2012) [Oral Presentation]
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178. Tae Woo Tak, Hwanyael Yu, **Deokjung Lee***, and T.K. Kim, “Preliminary Design of Ultra-long Cycle Fast Reactor Employing Breed-and-burn Strategy,” PHYSOR2012, Knoxville, USA, April 15-20 (2012)
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