

CURRICULUM VITAE

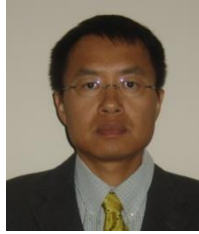
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Technology
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EDUCATION

- 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

RESEARCH INTERESTS

Computational Reactor Physics

- Deterministic and Probabilistic Neutron Transport Methods and Codes Developments
- STREAM/RASTK/MCS
- Resonance Treatment Method Development
- Multi-pole Cross Section Methods
- Advanced Iterative Methods/Acceleration Techniques for Transport and Diffusion Analysis
- High Fidelity Multi-physics Modeling and Simulation
- Neutronics/Subchannel/System/Fuel Performance Coupling
- JFNK
- Advanced Methods for Neutron Transport and Diffusion Calculation
- Sensitivity Analysis/Uncertainty Quantification

Advanced Reactor Design and Analysis

- Next Generation Nuclear Reactor & Advance Burner Reactor
- Ultra-long Cycle Fast Reactor
- Liquid Metal Fast Reactor Design
- Molten-Salt Reactor
- Sodium-cooled Fast Reactor
- Very High Temperature Reactor
- Fuel Cycle Analysis
- Source Term/ Criticality Safety Analysis

High Performance Computing

- MPI/OpenMP
- Domain Decomposition

PUBLICATIONS (5 Book Chapters, 51 SCIs, 181 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. 23: Research activities, Korea), "Molten Salt Reactors," in writing with Prof. Dolan at UIUC
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

1. Jinsu Park, Wonkyeong Kim, Sooyoung Choi, Jiankai Yu, **Deokjung Lee***, "Comparative Analysis of VERA Depletion Benchmark through Consistent Code-to-Code Comparison", **J. Nucl. Sci. Technol.**, Under review (2017)
2. Jinsu Park, Tae Young Han, **Deokjung Lee**, Hyun Chul Lee*, "VHTR Core Analysis of McCARD and DeCART with High Temperature Engineering Test Reactor Benchmark", **Annals of Nuclear Energy**, Under review (2017)
3. Eun Jeong, Jinsu Park, Hyun Chul Lee, Peng Zhang, **Deokjung Lee***, "Analysis of Very High Temperature Gas-Cooled Reactor PMR-200 with DeCART/CAPP Code System", **J. Nucl. Sci. Technol.**, Under review (2017)
4. 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)

5. Jaerim Jang, Wonkyeong Kim, Sanggeol Jeong, Eun Jung, Jinsu Park, Matthieu Lemaire, Hyunsuk Lee, **Deokjung Lee***, "Validation of UNIST Monte Carlo Code MCS for Criticality Safety Analysis of PWR Spent Fuel Pool and Storage Cask", **J. Nucl. Sci. Technol.**, Under review (2017)
6. Peng Zhang, Hyunsuk Lee, **Deokjung Lee***, "Monte Carlo Implementation of the Modified Power Method for Three-Dimensional Criticality Eigenvalue Problems," **Comput. Phys. Commun.**, Under review (2017)
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.**, Under review (2017)
8. Peng Zhang, Hyunsuk Lee, **Deokjung Lee***, "On the Transfer Matrix of the Modified Power Method," **Comput. Phys. Commun.**, Under review (2017)
9. 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," **Annals of Nuclear Energy**, Under review (2017)
10. 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.**, Accepted for publication (2017)
11. Yunki Jo, Chidong Kong, Jiankai Yu, **Deokjung Lee***, Sihwan Kim, "High Accuracy Boronmeter Design Developed for Light Water Reactors", **Annals of Nuclear Energy**, Published Online. <http://doi.org/10.1016/j.anucene.2017.06.013> (2017)
12. Peng Zhang, Hyunsuk Lee, **Deokjung Lee***, "Extension of the Noise Propagation Matrix Method for Higher Mode Solutions," **J. Comput. Phys.**, Published Online. <http://dx.doi.org/10.1016/j.jcp.2017.05.007> (2017)
13. 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.**, Published Online. <http://dx.doi.org/10.1080/00223131.2017.1299648> (2017)
14. 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)
15. 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.**, Published Online. <http://dx.doi.org/10.1080/00223131.2017.1299649> (2017)

16. 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," **Annals of Nuclear Energy**, 101: 139-150.
<http://dx.doi.org/10.1016/j.anucene.2016.11.002> (2017)
17. 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**, 99: 124-135.
<http://dx.doi.org/10.1016/j.anucene.2016.07.026> (2017)
18. 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)
19. 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)
20. 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)
21. 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)
22. 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)
23. Chidong Kong, Hyunsuk Lee, Taewoo Tak, **Deokjung Lee***, Si Hwan Kim, Seokjean Lyou, "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)
24. 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)
25. 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)
26. 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)

27. 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)
28. Jiwon Choe, **Deokjung Lee***, Ho Cheol Shin, "New Burnable Absorber for Long-Cycle Low Boron Operation of PWRs," **Annals of Nuclear Energy**, 88: 272-279. <http://dx.doi.org/10.1016/j.anucene.2015.11.011> (2016)
29. 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)
30. 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)
31. 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)
32. 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)
33. 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)
34. 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)
35. 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)
36. 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)
37. 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)

38. **Deokjung Lee***, T. Kozłowski , T.J. Downar, “Multi-Group SP3 Approximation for Simulation of A Three-Dimensional PWR Rod Ejection Accident,” *Annals of Nuclear Energy*, 77: 94-100, <http://dx.doi.org/10.1016/j.anucene.2014.10.019> (2015)
39. Hyunsuk Lee, Sooyoung Choi, Kyoong-Ho Cha, Kwangho Lee, **Deokjung Lee***, “New Computational 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)
40. 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)
41. 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)
42. 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)
43. 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)
44. Seongwoo Gwon, Myoungsu Shin, Benjamin Pimentel, **Deokjung Lee***, "Nonlinear Modeling Parameters of RC Coupling Beams in A Coupled Wall System," *Earthquakes and Structures*, 7 (5): 817-842, <http://dx.doi.org/10.12989/eas.2014.7.5.817> (2014) (IF: 1.138, Rank: 47/124)
45. Taewoo Tak, **Deokjung Lee***, T.K. Kim, Ser Gi Hong, “Optimization Study for Ultra-long Cycle Fast Reactor Core Concept,” *Annals of Nuclear Energy*, 73: 145-161, <http://dx.doi.org/10.1016/j.anucene.2014.06.030> (2014)
46. Chidong Kong, **Deokjung Lee***, Eunki Lee, “Stability Improvement of Noise Analysis Method in case of Random Noise Contamination for Subcriticality Measurements,” *Annals of Nuclear Energy*, 71: 245-253, <http://dx.doi.org/10.1016/j.anucene.2014.04.013> (2014)
47. Min Jae Lee, Han Gyu Joo*, **Deokjung Lee**, Kord Smith, “Coarse Mesh Finite Difference Formulation for Accelerated Monte Carlo Eigenvalue Calculation,” *Annals of Nuclear Energy*, vol. 65: 101-113, <http://dx.doi.org/10.1016/j.anucene.2013.10.025> (2014)

48. **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)
49. **Deokjung Lee***, Joel Rhodes, Kord Smith, “Quadratic Depletion Model for Gadolinium Isotopes in CASMO-5,” *Nucl. Sci. Eng.*, 174: 79-86, <http://dx.doi.org/10.13182/NSE12-20> (2013)
50. 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)
51. **Deokjung Lee***, “Convergence Analysis of coarse mesh finite difference method Applied to Two-Group Three-Dimensional Neutron Diffusion Problem,” *J. Nucl. Sci. Technol.*, 49 (9): 926-936, <http://dx.doi.org/10.1080/00223131.2012.712478> (2012)
52. Tomasz Kozlowski*, Yunlin Xu, Thomas J. Downar, **Deokjung Lee**, “Cell Homogenization Method for Pin-by-Pin Neutron Transport Calculations,” *Nucl. Sci. Eng.*, 169: 1-18, <http://dx.doi.org/10.13182/NSE08-85> (2011)
53. **Deokjung Lee***, Kord Smith, Joel Rhodes, “The Impact of U-238 Resonance Elastic Scattering Approximations on thermal reactor Doppler Reactivity,” *Annals of Nuclear Energy*, 36 (3): 274-280, <http://dx.doi.org/10.1016/j.anucene.2008.11.026> (2009)
54. Hyun Chul Lee*, Jae Man Noh, Hyung Kook Joo, **Deokjung Lee**, Thomas J. Downar, “Fourier Convergence Analysis of Two-Dimensional/One-Dimensional Coupling Methods for the Three-Dimensional Neutron Diffusion Eigenvalue Problems,” *Nucl. Sci. Eng.*, 156: 74-85, <http://dx.doi.org/10.13182/NSE06-32> (2007)
55. Hyun Chul Lee*, **Deokjung Lee**, Thomas J. Downar, “Iterative Two- and One-Dimensional Methods for Three-Dimensional Neutron Diffusion Calculations,” *Nucl. Sci. Eng.*, 151 (1): 46-54, <http://dx.doi.org/10.13182/NSE04-68> (2005)
56. **Deokjung Lee***, Thomas J. Downar, Anthony Ulses, Bedirhan Akdeniz, Kostadin N. Ivanov, “Analysis of the OECD/NRC BWR Turbine Trip Transient Benchmark with the Coupled Thermal-hydraulics and Neutronics Code TRAC-M/PARCS,” *Nucl. Sci. Eng.*, 148 (2): 291-305, <http://epubs.ans.org/?a=2459> (2004)
57. **Deokjung Lee***, Thomas J. Downar, Yonghee Kim, “Convergence Analysis of the Nonlinear Coarse Mesh Finite Difference Method for One-dimensional Fixed-Source Neutron Diffusion Problem,” *Nucl. Sci. Eng.*, 147 (2): 127-147, <http://dx.doi.org/10.13182/NSE03-64> (2004)
58. **Deokjung Lee***, Thomas J. Downar, Yonghee Kim, “A Nodal and Finite Difference Hybrid Method for Pin-by-Pin Heterogeneous Three-dimensional Light Water Reactor Diffusion Calculations,” *Nucl. Sci. Eng.*, 146 (3): 319-339, <http://epubs.ans.org/?a=2412> (2004)
59. **Deokjung Lee**, Chang Hyo Kim*, “Modified Borresen’s Coarse-Mesh Method for Improved Power Distribution Monitoring System Program Development for PWR,” *Journal of Korean Nuclear Society* vol. 27 (4): 555 (1995)

*: Corresponding Author

Refereed Topical Meetings / Conferences

1. 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)
2. 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)
3. 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)
4. 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)
5. 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]
6. 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]
7. 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]
8. 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]
9. 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]
10. 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]

11. 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]
12. 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]
13. 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]
14. 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]
15. 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]
16. 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]
17. .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]
18. Eun Jeong, Jiwon Choe, and **Deokjung Lee**, Ho Cheol Shin, "Impact of Erbium in Long Cycle Operation of PWR," KNS Fall Meeting, Gyeongju, Korea, October 26-28 (2016)
19. 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)
20. 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)
21. 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)
22. Peng ZHANG, Hyunsuk LEE, and **Deokjung LEE**, "Extension of NPMM for Higher Mode Solutions," KNS Fall Meeting, Gyeongju, Korea, October 26-28 (2016)
23. 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)

24. 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)
25. 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)
26. 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)
27. 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)
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