

## CECIL V. PARKS

### List of Publications

#### BOOK 1

#### 1976

1. J. R. Beeler, M. F. Beeler, and C. V. Parks, ACollision Cascades in Iron and Niobium,@ *Proceedings of the International Conference on Radiation Effects and Tritium Technology for Fusion Reactors*, Vol. I, CONF-750989, pp. 362B381, 1976.

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2. R. L. Murray and C. V. Parks, ANeutron Thermalization in a Monatomic Gas,@ *Proceedings of the 1978 Southeastern Seminar on Thermal Sciences*, held at Raleigh, NC, April 6B7, 1978.

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3. C. V. Parks and J. R. Beeler, Jr., AComputer Experiments on Radiation Damage in Niobium,@ *Trans. Am. Nucl. Soc.* **32**, 257B258, Atlanta, GA, June 3B8, 1979; also NAV-NCSU-113-78 by C. V. Parks.
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5. C. F. Weber, D. G. Cacuci, and C. V. Parks, AApplications of Differential Sensitivity Theory for Problems with Discontinuities,@*Trans. Am. Nucl. Soc.* **34**, 314B315, 1980.
6. P. J. Maudlin and C. V. Parks, AGeneralized Sensitivity Theory Applied to the MELT-III A Fast Reactor Safety Code,@*Trans. Am. Nucl. Soc.* **34**, 520B521, 1980.

7. P. J. Maudlin, C. V. Parks, and C. F. Weber, AThermal-Hydraulic Differential Sensitivity Theory,@ Paper No. 80-WA/HT-56, ASME Winter Annual Meeting, November 16B21, 1980, Chicago, IL, 1980; also ORNL/CSD/TM-126.
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10. C. V. Parks and P. J. Maudlin, AApplication of Differential Sensitivity Theory to a Neutronic/Thermal-Hydraulic Reactor Safety Code,@ *Nucl. Tech.* **54**, 38B53, 1981; also ORNL/CSD/TM-154.
11. P. J. Maudlin, C. V. Parks, and D. G. Cacuci, ADifferential Sensitivity Theory Applied to Movement of Maxima Responses,@*Trans. Am. Nucl. Soc.* **38**, 333, 1981.
12. C. V. Parks and P. J. Maudlin, ATechnical Note: An Adjoint-Based Sensitivity Methodology for Reactor Safety,@ *Nucl. Safety* **22**(6), 725B727, November-December 1981.

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13. J. C. Ryman, O. W. Hermann, C. C. Webster, and C. V. Parks, *Fuel Inventory and Afterheat Power Studies of Uranium-Fueled Pressurized Water Reactor Fuel Assemblies Using the SAS2 and ORIGEN-S Module of SCALE with an ENDF/B-V Updated Cross Section Library*, NUREG/CR-2397 (ORNL/CSD-90), Union Carbide Corp., Nuclear Div., Oak Ridge Natl. Lab., September 1982.
14. Editor of *SCALE: A Modular Code System for Performing Standardized Computer Analyses for Licensing Evaluation*, Vols. 1-3, NUREG/CR-0200, U.S. Nuclear Regulatory Commission (originally issued July 1980, reissued January 1982, Revision 1 issued July 1982, Revision 2 issued June 1983, Revision 3 issued December 1984).
15. J. C. Ryman, O. W. Hermann, C. C. Webster, and C. V. Parks, AA Simplified Method for Predicting Afterheat Power From Uranium-Fueled PWR Fuel Assemblies,@ *Proceedings of the International Meeting on Thermal Nuclear Reactor Safety*, August 29BSeptember 2, 1982, Chicago, IL.

16. D. G. Cacuci, P. J. Maudlin, and C. V. Parks, *Applications of Differential Sensitivity Theory for Extremum-Type Responses*, ORNL/TM-7717, Union Carbide Corp., Nuclear Div., Oak Ridge Natl. Lab., May 1982; also *Adjoint Sensitivity analysis of Extremum-Type Responses in Reactor Safety*,@ *Nucl. Sci. Eng.* **83**, 112B135, January 1983.
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18. C. V. Parks, *The SCALE Code System*, *Proceedings of an ANS Topical Meeting on Advances in Reactor Computations*, p. 218 of ISBN:O-89448-111-8, Salt Lake City, Utah, March 28-31, 1983.
19. C. V. Parks, O. W. Hermann, T. J. Hoffman, N. F. Landers, L. M. Petrie, J. S. Tang, and W. D. Turner, *Standardized Analyses of Nuclear Shipping Containers*@ Presented at the 7<sup>th</sup> International Symposium on Packaging and Transportation of Radioactive Materials, Vol. II, p. 1455 of CONF-830528, New Orleans, LA, May 15B20, 1983.

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20. C. V. Parks, O. W. Hermann, and J. R. Knight, *Parametric Study of Radiation Dose Rates from Rail and Truck Spent Fuel Transport Casks*, ORNL/CSD/TM-227, Martin Marietta Energy Systems, Inc., Oak Ridge Natl. Lab., August 1985.
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24. C. V. Parks, *Criticality and Shielding Analysis of Spent Fuel Storage Packages*,@ *Proceedings of Third International Spent Fuel Storage Technology Symposium/Workshop*, p. W-183 of CONF-860417, Vol. 2, held in Seattle, WA, April 8B10, 1986.
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26. L. D. Bates et al., *Summary of the Technical Review of the Safety Analysis Reports for Packaging (SARP) for the Transnuclear Transport/Storage Casks: TN-BRP and TN-REG*, ORNL/TM-9889, Martin Marietta Energy Systems, Inc., Oak Ridge Natl. Lab., July 1986.
27. C. V. Parks, *Report of Foreign Travel June 12, 1986-July 2, 1986*, ORNL/CSD/FTR-2327, Martin Marietta Energy Systems, Inc., Oak Ridge Natl. Lab., July 17, 1986.
28. C. V. Parks, *Adjoint-Based Sensitivity Analysis for Reactor Safety Applications*, ORNL/CSD/TM-231, Martin Marietta Energy Systems, Inc., Oak Ridge Natl. Lab., August 1986.
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30. C. V. Parks, L. M. Petrie, N. F. Landers, and J. A. Bucholz, *Computational Methods for Criticality Safety Analysis within the SCALE System*, *Workshop on the SCALE-3 Modular System*,@ Saclay, France, 24B27 June 1986, **Newsletter of the NEA Data Bank No. 33**, pp. 31B44, October 1986.
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32. C. V. Parks, J. S. Tang, O. W. Hermann, J. A. Bucholz, and M. B. Emmett, *Shielding Analysis Methods Available in the SCALE Computational System*, *Workshop on the SCALE-3 Modular System*,@ Saclay, France, 24B27 June 1986, **Newsletter of the NEA Data Bank NO. 33**, pp. 45B66, October 1986.
33. C. V. Parks, G. E. Giles, K. W. Childs, and C. B. Bryan, *Heat Transfer Analysis Capabilities of the SCALE Computational System*, *Workshop on the SCALE-3 Modular System*,@ Saclay, France, 24B27 June 1986, **Newsletter of the NEA Data Bank No. 33**, pp. 67B95, October 1986.

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36. C. V. Parks, B. L. Broadhead, R. W. Roussin, J. C. Gauthey, S. N. Cramer, B. L. Kirk, AIntercomparison of Cross-Section Libraries Used for Spent Fuel Cask Shielding Analyses,@ *Proceedings of Theory and Practices in Radiation Protection and Shielding*, April 22B24, 1987, Knoxville, TN, Vol. 2, pp. 559B569, 1987.
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39. C. V. Parks and R. M. Westfall, *Joint Report of Foreign Travel of C. V. Parks, Staff Member, and R. M. Westfall*, ORNL/CSD/FTR-2571, Martin Marietta Energy Systems, Inc., Oak Ridge Natl. Lab., June 29, 1987.
40. C. V. Parks, *Summary Description of the SCALE Modular Code System*, NUREG/CR-5033 (ORNL/CSD/TM-252), Martin Marietta Energy Systems, Inc., Oak Ridge Natl. Lab., December 1987.
41. C. V. Parks, J. V. Pace, III, and O. W. Hermann, ACharacterization of Neutron Sources from Spent Fuel Casks,@ *Trans. Am. Nucl. Soc.* **55**, 534B535, November 1987.

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47. C. V. Parks, *Report of Foreign Travel by C. V. Parks*, ORNL/CSD/FTR-3054, Martin Marietta Energy Systems, Inc., Oak Ridge Natl. Lab., September 30, 1988.
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56. N. M. Greene, J. W. Arwood, and C. V. Parks, "The LAW Library - A Multigroup Cross-Section Library for Use in Radioactive Waste Analysis Calculations," *Proceedings of the International Topical Meeting on Safety Margins in Criticality Safety*, November 26-30, 1989, San Francisco, CA.
57. C. V. Parks and P. B. Fox, "Demonstration of Criticality Safety for the Modified TN-REG and TN-BRP Transport/Storage Casks," *Proceedings of the International Topical Meeting on Safety Margins in Criticality Safety*, November 26-30, 1989, San Francisco, CA, pp. 331-339.

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61. B. L. Broadhead, M. C. Brady, and C. V. Parks, *Benchmark Shielding Calculations for the NEACRP Working Group on Shielding Assessment of Transportation Packages*, ORNL/CSD/TM-272, Martin Marietta Energy Systems, Inc., Oak Ridge Natl. Lab. (November 1990).

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