

# Nuclear Science and Engineering

VOLUME 182 · NUMBER 2 · FEBRUARY 2016

## Contents

### TECHNICAL PAPERS

- 135** Improved Mixed Oxide Fuel Calculations with the Evaluated Nuclear Data Library JEFF-3.2

*G. Noguere, D. Bernard, P. Blaise, O. Bouland, L. Leal, P. Leconte, O. Litaize, Y. Penelaiu, B. Roque, A. Santamarina, J.-F. Vidal*

- 151** A Linear Source Approximation Scheme for the Method of Characteristics  
*Rodolfo M. Ferrer, Joel D. Rhodes III*

- 166** Development and Evaluation of High-Fidelity Product and Evenly Spaced Angular Quadratures for Three-Dimensional Discrete Ordinates Calculations with Large Air Regions

*Daniel B. Fromowitz, Gary B. Zeigler*

- 181** Fission and Surface Source Iteration Method for Domain Decomposed Monte Carlo Whole-Core Calculation

*YuGwon Jo, Nam Zin Cho*

- 197** Design Space Analysis for Breed-and-Burn Reactor Cores

*Staffan Qvist, Ehud Greenspan*

- 213** Developments in Core-Barrel Motion Monitoring and Applications to the Ringhals PWR Units

*Imre Pázsit, Cristina Montalvo, Henrik Nyblén, Tell Andersson, Augusto Hernández-Solís, Petty Bernitt Cartemo*

- 228** Online Monitoring and Prognostics for Passive Components in Nuclear Power Plants

*Pradeep Ramuhalli, Surajit Roy, Jangbom Chai*

- 243** Quantifying 3-D Positional Uncertainty of Radiological Material from Nuclear Detonation Videos

*Daniel T. Schmitt, Robert Slaughter, Gilbert L. Peterson*

—continued—

## Contents continued

VOLUME 182 · NUMBER 2 · FEBRUARY 2016

### TECHNICAL NOTE

- 256** Neutron Emission Spectra of Triton Beams of 20.22-MeV Fully Stopped in Targets of H<sub>2</sub>O, D<sub>2</sub>O, LiF, Si, Ni, Mo, Ta, W, Pt, and Au  
*M. Drosig, D. M. Drake*

### CORRIGENDUM

- 261** Evaluation of Spatial Correction Factors for BRAHMMA Subcritical Assembly  
*S. Bajpai et al.*