Nuclear Science and Engineering

VOLUME 183 · NUMBER 3 · JULY 2016

Contents

TECHNICAL PAPERS

- **305** Predictive Modeling Applied to a Spent Fuel Dissolver Model—I: Adjoint Sensitivity Analysis

 James J. Peltz, Dan G. Cacuci
- 332 Predictive Modeling Applied to a Spent Fuel Dissolver Model—II:
 Uncertainty Quantification and Reduction

 James J. Peltz, Dan G. Cacuci, Aurelian F. Badea, Madalina C. Badea
- **347** Resonance Parameter Adjustment Based on Integral Experiments *Vladimir Sobes, Luiz Leal, Goran Arbanas, Benoit Forget*
- 356 A Preliminary Examination of the Application of Unscented Transformation Technique to Error Propagation in Nonlinear Cases of Nuclear Data Science

 Harshavardhan Kadvekar, Sana Khan, Sangeetha Prasanna Ram,

 Jayalekshmi Nair, S. Ganesan
- 371 Total Uncertainty Analysis for PWR Assembly Based on the Statistical Sampling Method

 Tiejun Zu, Chenghui Wan, Liangzhi Cao, Hongchun Wu, Wei Shen
- **387** Improvement of Code Behavior in a Design of Experiments by Metamodeling *François Bachoc, Karim Ammar, Jean-Marc Martinez*
- 407 Semianalytical Approximation and Lookup Table of Neutron Escape Probability from Rectangular Cell for Collision Probability Method
 T. Matsumura
- **421** Calculating Time-Integral Quantities in Depletion Calculations *Aarno Isotalo*

INDEXES/CONTENTS

- 430 Author Index
- **431** Subject Index
 - iii Contents of Volume 183