

### TECHNICAL PAPERS

#### FISSION REACTORS

- 221** Analysis of the Limiting Safety System Settings of a Fluoride Salt-Cooled High-Temperature Test Reactor / *Yao Xiao, Lin-Wen Hu, Charles Forsberg, Suizheng Qiu, Guanghui Su, Kun Chen, Naxiu Wang*
- 235** Modeling the Detection of Delayed Neutron Signatures in MCNP6 and Comparisons with Measurements of  $^{233}\text{U}$ ,  $^{235}\text{U}$ , and  $^{239}\text{Pu}$  / *M. T. Andrews, J. T. Goorley, E. C. Corcoran, D. G. Kelly*
- 243** Application of an Improved Mechanical Shim Control Strategy for AP1000 Reactor / *Pengfei Wang, Jiashuang Wan, Shoujun Yan, Yang Liu, Fuyu Zhao*

#### FUEL CYCLE AND MANAGEMENT

- 260** Preliminary Economic Evaluation of Thorium-Based Fuels in PWRs / *M. H. Du Toit, A. C. Cilliers*
- 270** An Examination of CANDU Fuel Performance Margins Derived from a Statistical Assessment of Industrial Manufacturing Data / *Travis A. Cunning, Paul Chan, Mahesh D. Pandey, Aniket Pant*

#### THERMAL HYDRAULICS

- 282** Experimental Investigation of a Scaled Water-Cooled Reactor Cavity Cooling System / *Rodolfo Vaghetto, Yassin A. Hassan*
- 294** Thermal Modeling of High-Level Nuclear Waste Disposal in a Salt Repository / *Dylan R. Harp, Philip H. Stauffer, Phoolendra K. Mishra, Daniel G. Levitt, Bruce A. Robinson*

#### RADIATION MEASUREMENTS AND GENERAL INSTRUMENTATION

- 308** In-Core Flux Sensor Evaluations at the ATR Critical Facility / *Troy Unruh, Benjamin Chase, Joy Rempe, David Nigg, George Imel, Jason Harris, Todd Sherman, Jean-François Villard*

#### REACTOR SAFETY

- 316** Cesium Isotope Composition in Fukushima Daiichi Units After Boiling Water Reactor Accident / *Masato Takahashi, Kenichi Yoshioka*

# CONTENTS / SEPTEMBER 2014—VOL. 187, NO. 3

(Continued)

## TECHNICAL NOTE

### RADIATION TRANSPORT AND PROTECTION

- 328** Probability Correction Approach to Calibrate High-Purity Germanium Cylindrical Detectors Using Parallelepiped Sources / *Sherif S. Nafee*

## DEPARTMENTS

- 337** Volume 187 Indexes  
v Volume 187 Contents