

# Nuclear Technology

VOLUME 197 · NUMBER 2 · FEBRUARY 2017

## Contents

### CRITICAL REVIEW

- 119** Tritium Control and Capture in Salt-Cooled Fission and Fusion Reactors:  
Status, Challenges, and Path Forward  
*Charles W. Forsberg, Stephen Lam, David M. Carpenter, Dennis G. Whyte,  
Raluca Scarlat, Cristian Contescu, Liu Wei, John Stempien, Edward Blandford*

### TECHNICAL PAPERS

- 140** Prediction of Countercurrent Flow Limitation and Its Uncertainty in Horizontal  
and Slightly Inclined Pipes  
*Michio Murase, Yoichi Utanohara, Takayoshi Kusunoki, Yasunori Yamamoto,  
Dirk Lucas, Akio Tomiyama*
- 158** Experimental Investigation of Void Drift in Simulated Subchannels of a  
Natural-Circulation Pressure Tube-Type BWR  
*M. P. Sharma, A. K. Nayak*
- 171** Modeling of Water Ingression Mechanism for Corium Cooling with MELCOR  
*Tuomo Sevón*
- 180** Technical Basis for the Use of a Correlated Neutron Source in the Uranium Neutron  
Coincidence Collar  
*M. A. Root, H. O. Menlove, R. C. Lanza, C. D. Rael, K. A. Miller, J. B. Marlow*
- 191** Thermal Conductivity Measurement of Granular  $\text{UO}_2(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O}$   
*Gary M. Stange, Michael Corradini, Robert Swader, George Petry,  
Thomas R. Mackie, Kevin W. Eliceiri*
- 201** Nuclear Radiation-Tolerant Wireless Transmitter Irradiation Test Results  
*Jorge V. Carvajal, Michael D. Heibel, Nicola G. Arlia, Andrew Bascom,  
Kenan Ünlü*
- 209** Some Mathematical and Geophysical Considerations in Radioisotope  
Dating Applications  
*Robert B. Hayes*

—continued—

## Contents continued

VOLUME 197 • NUMBER 2 • FEBRUARY 2017

### TECHNICAL NOTE

- 219** Removal of Cesium from Simulated Radioactive Wastewater Using a Novel Disc Tubular Reverse Osmosis System

*Fei Jia, Jufeng Li, Jianlong Wang, Yuliang Sun*

### CORRIGENDUM

- 225** Fuel-Coolant Interaction Test Results Under Different Cavity Conditions

*S. W. Hong, Y. S. Na, S. H. Hong, J. H. Song*