

# CONTENTS / FEBRUARY 2008—VOL. 161, NO. 2

## **TECHNICAL PAPERS**

#### **REACTOR SAFETY**

- 81 The Impact of Severe Accident Management Guidance on the Frequency of Containment Failure Modes of a Boiling Water Reactor / Kuan-Fu Chen, Ching-Hui Wu, Min Lee
- 98 Effect of the Surveillance Test Frequency of SDS1 on the Core Damage Probability / Sungwhan Cho, Jin Jiang

#### THERMAL HYDRAULICS

- 108 Core-Wide (In-Phase) Stability of Supercritical Water-Cooled Reactors—I: Sensitivity to Design and Operating Conditions / Jiyun Zhao, Pradip Saha, Mujid S. Kazimi
- 124 Core-Wide (In-Phase) Stability of Supercritical Water-Cooled Reactors—II: Comparison with Boiling Water Reactors / Jiyun Zhao, Pradip Saha, Mujid S. Kazimi

#### RADIOACTIVE WASTE MANAGEMENT AND DISPOSAL

- 140 Impact of Spatial Heterogeneity of Source Term in Near-Surface Repository on Releases to Groundwater Pathway / Povilas Poskas, Raimondas Kilda, Valdas Ragaisis, Terry M. Sullivan
- 156 Long-Term Safety Assessment of a (Near-Surface) Short-Lived Radioactive Waste Repository in Lithuania / J. Mazeika, R. Petrosius, V. Jakimaviciute-Maseliene, D. Baltrunas, K. Mazeika, V. Remeikis, T. Sullivan

#### MATERIALS FOR NUCLEAR SYSTEMS

169 Corrosion Resistance of Amorphous Fe<sub>49.7</sub>Cr<sub>17.7</sub>Mn<sub>1.9</sub>Mo<sub>7.4</sub>W<sub>1.6</sub>B<sub>15.2</sub>C<sub>3.8</sub>Si<sub>2.4</sub> Coating: A New Criticality Control Material / J. C. Farmer, J.-S. Choi, C.-K. Saw, R. H. Rebak, S. D. Day, T. Lian, P. D. Hailey, J. H. Payer, D. J. Branagan, L. F. Aprigliano

## **TECHNICAL NOTE**

### **MISCELLANEOUS**

190 Plutonium Release Fractions from Accidental Fires / Vladimir Kogan, Philip M. Schumacher