

# nuclear technology®

CONTENTS / FEBRUARY 1995—VOL. 109, NO. 2

## TECHNICAL PAPERS

### NUCLEAR REACTOR SAFETY

- 171 Modeling of Molten Metal/Water Interactions / *Ali Uludogan, Michael L. Corradini*
- 187 Influence of Isolation Condensers on Boiling Water Reactor Performance During an Anticipated Transient Without Scram / *Hasna J. Khan, Hsiang-Shou Cheng, Upendra S. Rohatgi*
- 207 Iodine Release During a Steam Generator Tube Rupture / *James P. Adams*

### ENRICHMENT AND REPROCESSING SYSTEMS

- 216 Extraction Chromatographic Separation of Minor Actinides from PUREX High-Level Wastes Using CMPO / *J. N. Mathur, M. S. Murali, R. H. Iyer, A. Ramanujam, P. S. Dhami, V. Gopalakrishnan, M. K. Rao, L. P. Badheka, Asoke Banerji*

### RADIATION APPLICATIONS

- 226 Reactor-Based Prompt Gamma Neutron Activation Setup Using a Low-Power Research Reactor / *Chien Chung, Liq-Ji Yuan*

### HEAT TRANSFER AND FLUID FLOW

- 236 Experimental Study on Flow Rate Measurement of Buoyancy-Driven Exchange Flow / *Motoo Fumizawa*
- 246 Fundamental Study on Duplex Steam Generator Tubes for Liquid-Metal-Cooled Fast Reactors / *Masanori Aritomi, Tomoaki Mizushima, Hiroshi Yabuta*

### REACTOR OPERATIONS

- 255 Intelligent Alarm-Processing System for Nuclear Power Plants / *Norio Naito, Shiroh Ohtsuka*
- 265 *In Situ* Gamma Spectrometry of Piping in a CANDU Heat Transport System—Application During Decontamination / *Aamir Husain, Calvin E. Breckenridge, David Storey*
- 275 Simulation of a Marine Nuclear Reactor / *Tsuyoshi Kusunoki, Masahiko Kyouya, Hideo Kobayashi, Masa-Aki Ochiai*

(Continued)

## ON THIS COVER

This month's cover is an artist's interpretation, which is drawn from Fig. 1 in the paper by James P. Adams.

# CONTENTS / FEBRUARY 1995—VOL. 109, NO. 2

(Continued)

## REACTOR CONTROL

- 286 Artificial Neural Networks Versus Conventional Methods for Boiling Water Reactor Stability Monitoring / *Tim H. J. J. van der Hagen*

## DEPARTMENT

- 306 Book Review