

# nuclear technology®

CONTENTS / SEPTEMBER 2006—VOL. 155, NO. 3

## TECHNICAL PAPERS

### FISSION REACTORS

- 253 Development of Drywell Water Level Computational Aid and Application on Containment Flooding Strategy of Mark-III Nuclear Power Plant / *Wei-Nian Su, Shih-Jen Wang, I-Ming Huang, Show-Chyuan Chiang*
- 265 Full-Height Thermal-Hydraulic Scaling Analysis of Pb-Bi-Cooled Fast Reactor PEACER / *Il S. Lee, Kune Y. Suh*

### FUEL CYCLE AND MANAGEMENT

- 282 Analysis of Pellet-Clad Mechanical Interaction Process of High-Burnup PWR Fuel Rods by RANNS Code in Reactivity-Initiated Accident Conditions / *Motoe Suzuki, Toyoshi Fuketa, Hiroaki Saitou*
- 293 An Assessment of Fuel Damage in Postulated Reactivity-Initiated Accidents / *Ralph O. Meyer*

### THERMAL HYDRAULICS

- 312 A Linear Stability Analysis for Natural-Circulation Loops Under Supercritical Conditions / *R. Jain, M. L. Corradini*
- 324 Simulant Melt Experiments on In-Vessel Retention Through External Reactor Vessel Cooling / *Kyoung-Ho Kang, Rae-Joon Park, Sang-Baik Kim, Hee-Dong Kim, Soon-Heung Chang*
- 340 A System Design Study of a Fast Breeder Reactor Hydrogen Production Plant Using Thermochemical and Electrolytic Hybrid Process / *Yoshitaka Chikazawa, Toshio Nakagiri, Mamoru Konomura, Shouji Uchida, Yoshihiko Tsuchiyama*

### NUCLEAR PLANT OPERATIONS AND CONTROL

- 350 A  $^{16}\text{N}/^{19}\text{O}$  Monitor for Leak Detection in a Steam Generator / *Shengyao Ding, Kun Xu, Xiaojian Huang, Zheng Wang*

### MATERIALS FOR NUCLEAR SYSTEMS

- 358 Calculation of Corrosion Rates of Alpha-Doped  $\text{UO}_2$  / *Hilbert Christensen*

## DEPARTMENTS

- 365 Corrigendum
- 366 Volume 155 Indexes
- v Volume 155 Contents