

CONTENTS / SEPTEMBER 1996—VOL. 115, NO. 3

TECHNICAL PAPERS

FISSION REACTORS

- 243 Advanced Neutron Source Enrichment Study / *Robert A. Bari, Hans Ludewig, John R. Weeks*

NUCLEAR REACTOR SAFETY

- 266 Method and Results of Safety Evaluation of the High-Temperature Engineering Test Reactor / *Shigeaki Nakagawa, Kazuhiko Kunitomi, Kazuhiro Sawa*

NUCLEAR FUEL CYCLES

- 281 Thermal Bonding of Light Water Reactor Fuel Using Nonalkaline Liquid-Metal Alloy / *Richard F. Wright, James S. Tulenko, Glen J. Schoessow, Richard G. Connell, Jr., Mark A. Dubecky, Thad Adams*

ENRICHMENT AND REPROCESSING SYSTEMS

- 293 Ion-Exchange Selectivity of Tertiary Pyridine-Type Anion-Exchange Resin for Treatment of Spent Nuclear Fuels / *Masanobu Nogami, Masao Aida, Yasuhiko Fujii, Akira Maekawa, Shinobu Ohe, Hiroomi Kawai, Morihiro Yoneda*

RADIOACTIVE WASTE MANAGEMENT

- 298 Considerations of Autocatalytic Criticality of Fissile Materials in Geologic Repositories / *William E. Kastenberg, Per F. Peterson, Joonhong Ahn, J. Burch, G. Casher, Paul L. Chambré, Ehud Greenspan, Donald R. Olander, Jasmína L. Vujic, B. Bessinger, Neville G. W. Cook, Fiona M. Doyle, L. Brun Hilbert, Jr.*

RADIATION BIOLOGY AND MEDICINE

- 311 Design of a Small-Animal Thermal Neutron Irradiation Facility at the Brookhaven Medical Research Reactor / *Hungyuan B. Liu*

HEAT TRANSFER AND FLUID FLOW

- 320 Loss-of-Normal-Feedwater Sensitivity Studies for AP600 Behavior Characterization / *Gianfranco Saiu, Gabriele Del Nero, Antonio Madonna, Giuseppe Marella, Andrea Orazi*
- 333 Development and Application of a Fully Implicit Fluid Dynamics Code for Multiphase Flow / *Tadashi Morii, Yumi Ogawa*

REACTOR OPERATIONS

- 342 A Hybrid Approach for Detecting and Isolating Faults in Nuclear Power Plant Interacting Systems / *J. Wesley Hines, Don W. Miller, Brian K. Hajek*

TECHNICAL NOTE

NUCLEAR REACTOR SAFETY

- 359 Modeling of Boron Species in the Falcon 17 and ISP-34 Integral Tests / *Mihalis Lazaridis, Joaquim Areia Capitão, Yannis Drossinos*

DEPARTMENTS

- 368 Volume 115 Indexes
v Volume 115 Contents