

TECHNICAL PAPERS

FISSION REACTORS

- 279 Multiple-Reheat Brayton Cycles for Nuclear Power Conversion with Molten Coolants / *Per F. Peterson*
- 289 Molten-Salt-Cooled Advanced High-Temperature Reactor for Production of Hydrogen and Electricity / *Charles W. Forsberg, Per F. Peterson, Paul S. Pickard*

REACTOR SAFETY

- 303 Criticality Calculations Using the Isopiestic Density Law of Actinide Nitrates / *Nicolas P. Leclaire, Jacques A. Anno, Gérard Courtois, Pascal Dannus, Gilles Poullot, Veronique Rouyer*

THERMAL HYDRAULICS

- 324 Numerical Analysis of Pressure Propagation and Energy Conversion Ratio in Sodium Vapor Explosions / *Jie Liu, Seiichi Koshizuka, Yoshiaki Oka*

NUCLEAR PLANT OPERATIONS AND CONTROL

- 337 Hazard Assessment of Fire in Electrical Cabinets / *Elyahu Avidor, Francisco J. Joglar-Billoch, Frederick W. Mowrer, Mohammad Modarres*

REPROCESSING

- 358 Effect of Entrainment and Overflow Occurrences on Concentration Profile in PUREX Flow Sheet / *Yoshinori Ueda, Junichi Ishii, Shiro Matsumoto*

MATERIALS FOR NUCLEAR SYSTEMS

- 369 Swelling and Mechanical Property Changes in Russian and American Austenitic Steels in EBR-II and BN350 / *Fatma Yilmaz, Yassin A. Hassan, Douglas L. Porter, Oleg Romanenko*
- 379 Improved Application of Local Models to Steel Corrosion in Lead-Bismuth Loops / *Jinsuo Zhang, Ning Li*

MISCELLANEOUS

- 388 Theoretical Adiabatic Temperature and Chemical Composition of Sodium Combustion Flame / *Yasushi Okano, Akira Yamaguchi*

(Continued)

CONTENTS / DECEMBER 2003—VOL. 144, NO. 3

(Continued)

TECHNICAL NOTE

REPROCESSING

- 400** Algebraic Equation for Solvent Extraction Flow Sheet Under Existence of Abnormal Flows / *Yoshinori Ueda, Shiro Matsumoto*

DEPARTMENTS

- 407** Technical Reviewers
- 410** Volume 144 Indexes
- v** Volume 144 Contents