

nuclear technology®

CONTENTS / OCTOBER 1997—VOL. 120, NO. 1

TECHNICAL PAPERS

NUCLEAR REACTOR SAFETY

- 1 Determination of Code Accuracy in Predicting Small-Break LOCA Experiment / *Borut Mavko, Andrej Prošek, Francesco D'Auria*
- 19 A Radiation Barrier Alloy for Long-Term Storage of Special Nuclear Materials: Definition and Preliminary Assessment / *Carl A. Beard, John J. Buksa, J. Wiley Davidson, Stacey L. Eaton, John J. Park, James W. Toevs, Kenneth A. Werley*

ENRICHMENT AND REPROCESSING SYSTEMS

- 41 Solvent-Washing Process Using Butylamine in Fuel Reprocessing / *Gunzo Uchiyama, Sachio Fujine, Mitsuru Maeda*

MATERIALS

- 48 Chemical Behavior of Aqueous Iodine at the Forsmark Boiling Water Reactor Nuclear Power Plants / *Rikard Malmbeck, Gunnar Skarnemark*

HEAT TRANSFER AND FLUID FLOW

- 57 Thermal-Hydraulic Analysis of Bulk Evaporation and Condensation in a Multiphase Nuclear Fuel Cell / *Samim Anghaie, Zhongtao Ding*

REACTOR OPERATIONS

- 71 Quantitative Indicators of Detector String Impacting / *Ola Thomson, Ninos S. Garis, Imre Pázsit*

TECHNICAL NOTES

ENRICHMENT AND REPROCESSING SYSTEMS

- 81 Characteristics of Nonlinear Dynamics Dependent on TBP Concentration Change in the Extraction Process for Nuclear Fuel Reprocessing / *Masaru Todoriki, Atsuyuki Suzuki*

MATERIALS

- 86 On the Determination of Bottom Drain Oxygen in Boiling Water Reactors / *Digby D. Macdonald, Iouri Balachov*