

CONTENTS / OCTOBER 1988—VOL. 83, NO. 1

TECHNICAL PAPERS

NUCLEAR SAFETY

- 5 Criticality Safety Evaluation for High-Density Spent-Fuel Storage Racks / *Tien-Ko Wang, Szu-Li Chang, Shi-Ping Teng*
- 16 The Growth of Hygroscopic Particles During Severe Core Melt Accidents / *Jorma Jokiniemi*

FUEL CYCLES

- 24 The Composition of NO_x Generated in the Dissolution of Uranium Dioxide / *Tsutomu Sakurai, Akira Takahashi, Niro Ishikawa, Yoshihide Komaki*
- 31 Out-of-Core Fuel Cycle Optimization for Nonequilibrium Cycles / *Scott A. Comes, Paul J. Turinsky*

RADIOACTIVE WASTE MANAGEMENT

- 49 Development and Active Demonstration of Acid Digestion of Plutonium-Bearing Waste / *Herbert Wiczorek, Bernhard Oser*

HEAT TRANSFER AND FLUID FLOW

- 56 Identification of Two-Phase Flow Patterns by a Single Void Fraction Sensor / *Y. W. Wang, C. H. King, B. S. Pei*
- 65 IVA2 Verification: High-Pressure Gas Injection in a Liquid Pool / *Nikolay Ivanov Kolev*
- 81 Development of Computer Program DYNAM/US for Predicting Thermally Induced Flow Oscillations in Two-Phase Flow Systems / *S. M. Sami, M. Kraitem*
- 93 Determination of Transient Radial-Azimuthal Temperature Distributions in Fuel Bundles Under Loss-of-Coolant-Accident Conditions / *Nicholas T. Saltos, Richard N. Christensen, Tunc Aldemir*

DEPARTMENTS

- 1 Authors
- 110 Corrigenda

ON THIS COVER

This month's cover is taken from Fig. 1 in the paper by Sakurai et al.