

nuclear technology®

CONTENTS / OCTOBER 1974—VOL. 24, NO. 1

TECHNICAL PAPERS

REACTORS

- 7 Comparison of Two- and Three-Dimensional Calculations of Super Prompt Critical Excursions / *A. Birkhofer, A. Schmidt, W. Werner*
- 13 Transient Critical Heat Flux and Spacer Grid Studies / *L. A. Zielke, R. H. Wilson*
- 20 Fission Gas Behavior in Fast Reactor Fuel Under Transient Power Conditions / *J. W. Dias, D. Okrent, R. C. Erdmann*

FUEL CYCLES

- 33 An Equilibrium Approach to Optimal In-Core Fuel Management for Pressurized Water Reactors / *Krishan Chitkara, Joel Weisman*

MATERIALS

- 50 Fabrication Procedures for Unalloyed Molybdenum / *A. J. Moorhead, J. R. DiStefano, R. E. McDonald*
- 64 The Effect of Oxygen on the Corrosion of Vanadium and V-20% Ti by Liquid Lithium / *J. H. DeVan, R. L. Klueh*

INSTRUMENTS

- 73 A General Approach to the Design of Radiation Gauges / *A. Notea, Y. Segal*
- 81 Gamma-Ray Assay of Low-Enriched Uranium Waste / *R. B. Walton, E. I. Whitted, R. A. Forster*

TECHNICAL NOTES

MATERIALS

- 93 Empirical Swelling Equations for Solution-Annealed Type 304 Stainless Steel / *John P. Foster, Robert V. Strain*

INSTRUMENTS

- 99 Digital Period Meter / *W. R. Sheets*

DEPARTMENTS

- 3 Authors