

TECHNICAL PAPERS

FISSION REACTORS

- 131 Criticality Experiments with Subcritical Clusters of 2.35 and 4.31 wt% ^{235}U -Enriched UO_2 Rods in Water with Steel Reflecting Walls / *S. R. Bierman, E. D. Clayton*
- 145 Effect of Inoperable In-Core Detectors on Core Monitoring System Accuracy / *R. K. Endter, R. G. Foster*
- 155 Three Mile Island Accident Technical Support / *R. L. Long, T. M. Crimmins, W. W. Lowe*

NUCLEAR FUELS

- 174 An Analytical Model for Transient Gas Flow in Nuclear Fuel Rods / *D. S. Rowe, R. N. Oehlberg*
- 180 Calculation of Neutron Source Strength in Fast Flux Test Facility Fuel as a Function of Irradiation / *Paride A. Ombrellaro, David L. Johnson*

MATERIALS

- 201 Corrosion of Structural Alloys in Liquid Rubidium / *T. R. Pinchback, J. R. Winkel, D. K. Matlock, D. L. Olson*
- 208 Electrolytic Decontamination of Stainless Steel Using a Basic Electrolyte / *E. L. Childs, J. L. Long*
- 215 Chemical Compatibility of Uranium Carbides with Cr-Fe-Ni Alloys / *Edward C. Beahm, Charles A. Culpepper*
- 223 Behavior of Metallic Inclusions in Uranium Dioxide / *Rosa L. Yang, D. R. Olander*

(Continued)

ON THIS COVER

This month's cover is taken from the paper by R. L. Long et al., and is a composite of all in-core T/C readings following reactor coolant pump 2A trip.

CONTENTS / AUGUST 1981—VOL. 54, NO. 2

(Continued)

TECHNICAL NOTE

NUCLEAR SAFETY

- 234 The Interaction of High Temperature Core Debris with Concrete and Refractory Material / *E. Sowa, J. Pavlik*

DEPARTMENTS

- 127 Authors
- 239 Book Reviews