

# NUCLEAR SCIENCE AND ENGINEERING®

VOLUME 86, NUMBER 2, FEBRUARY 1984

## CONTENTS

### TECHNICAL PAPERS

- 129** Multinode Reactor Stability and Optimal Estimates of Domains of Attraction *T. Trombetti, D. L. Hetrick*
- 136** Subcritical Problems in Spherical Geometry *Raphael Aronson*
- 150** Critical Problems for Bare and Reflected Slabs and Spheres *Raphael Aronson*
- 157** Measurement of Fission Neutron Multiplicities for Thorium-232 and Uranium-235 with Incident Neutron Energies to 49 MeV *Robert E. Howe*
- 168** Neutron Capture in *s*-Wave Resonances of Iron-56, Nickel-58, and Nickel-60 *K. Wisshak, F. Käppeler, G. Reffo, F. Fabbri*
- 184** Measurements of Differential 14.7-MeV Neutron Scattering Cross Sections of Lithium-7 and Beryllium-9 *Shen Guanren, Wen Shenlin, Huang Tangzi, Li Anli, Bai Xixiang*
- 191** Stored Energy in a Radioactive Waste Borosilicate Glass: Its Frequency Factor and Kinetics and Its Source *William Primak, F. P. Roberts*
- 206** Time Dependence of Test Fuel Power Coupling During Transient Reactor Test Facility Irradiation Experiments *Gerald Klotzkin, Richard W. Swanson, Paul Hart, L. J. Harrison*

### TECHNICAL NOTES

- 219** Calculations of the Spectra of Fast Neutrons in Iron Spheres Using the Vitamin-C File *Feroz Ahmed, Otohiko Aizawa, Hiroyuki Kadotani*
- 224** Comparison of Some Finite Difference Formulas for Use with Equilateral Triangular Mesh Grid  $S_N$  Codes *K. Küfner*
- 229** Decaying Product Generation in Cylindrical and Rectangular Channels Under Electrostatic Field Effects *T. A. Korjack*
- 232** Compatibility Tests of Low-Vapor Pressure Perfluoropolyether Oils with  $UF_6$  *A. Ciancia, A. Ascensioni, C. Corti, G. Caporiccio*

(Continued)

## **CONTENTS**

**(Continued)**

### **BOOK REVIEWS**

- 239** Nuclear Reactor Safety, On the History of the Regulatory Process, David Okrent *Walter H. Jordan*
- 240** Glossary of Terms in Heat Transfer, Fluid Flow, and Related Topics, William Begell, Ed. *Francois Kertesz*

### **LETTERS TO THE EDITOR**

- 241** Effects of Phase and Velocity Distribution on Two-Phase Pressure Pulse Propagation *D. R. H. Beattie*
- 242** Reply to "Effects of Phase and Velocity Distribution on Two-Phase Pressure Pulse Propagation" *Dimitri Gidaspow*

- 243** **ANNOUNCEMENT OF CURRENT PUBLICATIONS**