

# NUCLEAR SCIENCE AND ENGINEERING®

VOLUME 86, NUMBER 4, APRIL 1984

## CONTENTS

- v Editorials: In Appreciation

### TECHNICAL PAPERS

- 335 Flux-Limited Diffusion Theory with Anisotropic Scattering *G. C. Pomraning*
- 344 Implementation of an Advanced Pairing Correction for Particle-Hole State Densities in Precompound Nuclear Reaction Theory *C. Y. Fu*
- 355 Investigations of Nuclear Elastic Scattering Effects by Means of the Boltzmann-Fokker-Planck Equation *Gerald Kamelander*
- 362 Neutron Capture Cross Sections of Tantalum from 2.6 to 1900 keV *R. L. Macklin*
- 372 Molten Fuel/Coolant Interactions: Recent Analysis of Experiments *M. L. Corradini*
- 388 A Practical Nonhomogeneous Two-Phase Flow Model for Light Water Reactor System Codes *Cherng-Shing Lin,  
William E. Kastenberg*

### TECHNICAL NOTES

- 401 Universality and Aperiodic Behavior of Nuclear Reactors *Jose March-Leuba,  
Dan G. Cacuci,  
Rafael B. Perez*
- 404 Precursors in Bayesian Estimation of Core-Melt Probability *H. W. Lewis*
- 405 Helical Geometry Effect on Tritium Breeding in Heliotron Fusion Reactor Blanket *H. Hasegawa,  
H. Nakashima, T. Matsui,  
M. Ohta*
- 409 Introduction of Partial Convergence Idea into Void Iteration for Boiling Water Reactor Computations *Wan-li Zhong*

### BOOK REVIEW

- 413 Measurement and Detection of Radiation, Nicholas Tsoulfanidis *John W. Poston*
- 414 VOLUME 86 AUTHOR AND SUBJECT INDEXES