

NUCLEAR SCIENCE AND ENGINEERING®

VOLUME 87, NUMBER 4, AUGUST 1984

CONTENTS

TECHNICAL PAPERS

- 349** Analytical Models for Simulating Hydrogen Transport in Reactor Containment Atmospheres
*Vincent P. Manno,
Michael W. Golay,
Kang Y. Huh*
- 361** Core-Management Analysis of the Fugen Heavy-Water-Moderated Plutonium-Uranium Mixed Oxide Reactor
*Hidemasa Kato,
Tohru Haga,
Shigeru Ohteru,
Hiroshi Kamikawa*
- 381** Measurements of the Energy Dependence of Prompt Neutron Emission from ^{233}U , ^{235}U , ^{239}Pu , and ^{241}Pu for $E_n = 0.005$ to 10 eV Relative to Emission from Spontaneous Fission of ^{252}Cf
*R. Gwin, R. R. Spencer,
R. W. Ingle*
- 405** Release of Fission Products from Irradiated Aluminide Fuel at High Temperatures
*Toshikazu Shibata,
Tadaharu Tamai,
Masatoshi Hayashi,
John C. Posey,
James L. Snelgrove*
- 418** Evaluation of Delayed-Neutron Emission Probabilities
*F. M. Mann, M. Schreiber,
R. E. Schenter,
T. R. England*
- 432** Analysis of Neutron Yields from High-Energy Proton Bombardment of Uranium Targets
H. Takahashi
- 444** Screening Sensitivity Theory
E. M. Oblow, F. G. Perey
- ### TECHNICAL NOTES
- 454** Application of an Exact Model Matching Technique to Coupled-Core Nuclear Reactor Control
*S. G. Tzafestas,
N. G. Chrysochoides,
K. Rokkos*
- 460** Optimization of the Fuel Cell of a Spectral Shift Controlled Reactor
F. Alcalá
- 469** Anisotropic Turbulent Flow in Rod Bundles
M. Abdelghany, M. C. Roco
- 478** Buildup Factors of Gamma Rays Including Bremsstrahlung and Annihilation Radiation for Water, Concrete, Iron, and Lead
*Kiyoshi Takeuchi,
Shun-ichi Tanaka*

(Continued)

CONTENTS

(Continued)

- 490** On Statistical Identification of Important Input Variables to Large Codes *Jussi K. Vaurio*

BOOK REVIEWS

- 496** Introductory Nuclear Reactor Statics, Karl O. Ott and Winfred A. Bazella *Bernard I. Spinrad*
- 497** Before It's Too Late, A Scientist's Case for Nuclear Energy, Bernard L. Cohen *Manson Benedict*

LETTERS TO THE EDITOR

- 498** Comment on a Sensitivity Coefficient in Depletion Perturbation Theory *Nicolaos J. Siakavellas*
- 498** Reply to "Comment on a Sensitivity Coefficient in Depletion Perturbation Theory" *M. L. Williams*

CORRIGENDA

- 500** Analysis of Finite Difference Approximation in a Discrete Ordinates Transport Equation in One-Dimensional Plane Geometry *V. Sundararaman, R. Vaidyanathan*
- 500** Response Matrix of Symmetric Nodes *M. Makai*