

# NUCLEAR SCIENCE AND ENGINEERING®

VOLUME 58, NUMBER 3, NOVEMBER 1975

## CONTENTS

263 Editorials

### TECHNICAL PAPERS

- 265 Estimation and Optimal Feedback Control Theory Applied to a Nuclear Boiling Water Reactor *B. Frogner, L. M. Grossman*
- 278 Evaluation of Neutron Inelastic Scattering Cross Sections of Uranium-238 from Neutron Spectrum Measurements in Fast Media *R. Paviotti Corcuera*
- 291 Neutron-Absorption Cross Sections of Some Radioactive Nuclides *Myron F. Elgart, Harmon L. Finston, Robert Rundberg, Evan T. Williams, Albert H. Bond, Jr., Emmanuel Yellin*
- 298 Gamma-Ray Production Cross Sections for Carbon and Nitrogen from Threshold to 20.7 MeV *V. C. Rogers, V. J. Orphan, C. G. Hoot, V. V. Verbinski*
- 314 Cross-Section Measurement of ( $n,p$ ) Reactions for  $^{27}\text{Al}$ ,  $^{46,47,48}\text{Ti}$ ,  $^{54,56}\text{Fe}$ ,  $^{58}\text{Ni}$ ,  $^{59}\text{Co}$ , and  $^{64}\text{Zn}$  from Near Threshold to 10 MeV *Donald L. Smith, James W. Meadows*
- 321 Stability of Moments in a Simple Neutronic System with Stochastic Parameters *Karmeshu, N. K. Bansal*

### TECHNICAL NOTES

- 328 Macroscopic Representation of the Anisotropic Neutron Flux Spectrum and a New Greuling-Goertzel Approximation *Yasunori Yamamura*
- 331 Neutron-Induced Gamma-Ray Production in Zinc for Incident-Neutron Energies of 4.9, 5.4, and 5.9 MeV *J. K. Dickens*

### COMPUTER CODE ABSTRACT

- 339 VENTURE *D. R. Vondy, T. B. Fowler, G. W. Cunningham*

(Continued)

VOLUME 58, NUMBER 3, NOVEMBER 1975

## **CONTENTS**

**(Continued)**

### **BOOK REVIEWS**

- |            |  |                       |
|------------|--|-----------------------|
| <b>340</b> | Neutron Transport Theory (Vols. I and II), Vinicio Boffi | <i>R. A. Bonalumi</i> |
| <b>341</b> | Elements of Nuclear Reactor Engineering, L. Wang Lau     | <i>Andrew Robeson</i> |

**342**    **CORRIGENDA**

**343**    **ANNOUNCEMENT OF CURRENT TOPICAL REPORTS**