CONTENTS

A. Z. Akcasu and A. Dalfes. A Study of Nonlinear Reactor Dynamics	86
Jeffery Lewins. Variational Representations in Reactor Physics Derived from a Physical Principle.	95
William G. Blessing. Techniques for the Irradiation of Ceramic Fuels in a Moderate Thermal Neutron Flux	108
R. C. Block, G. G. Slaughter, and J. A. Harvey. Thermal Neutron Cross-Section Measurements of U ²³³ , U ²³⁵ , Pu ²⁴⁰ , U ²³⁴ , and I ¹²⁹ with the ORNL Fast Chopper Time-of-Flight Neutron Spectrometer	12
Wolfgang Rothenstein. Some Monte Carlo and Analytical Results for Resonance Capture in Lattices	.22
S. B. Gunst, J. C. Connor, and E. Fast. The Stability of "Stable" Fission-Product Poisoning 1	28
John R. Weeks and Carl J. Klamut. Reactions between Steel Surfaces and Zirconium in Liquid Bismuth	.33
D. Graham Foster, Jr. Age of Na-Be Neutrons in Water and Kerosene	.48
JUAN KOPPEL. Time-Dependent Neutron Spectra	.57
Eugene L. Wachspress. A Numerical Technique for Solving Group Diffusion Equations	.64
Letters to the Editor	
E. M. Gelbard. Greuling-Goertzel Approximation in Muft IV Code	71
W. G. Pettus. Age of U ²³³ Fission Neutrons in Water	.71
P. G. Khubchandani. Scattering of Thermal Neutrons in Graphite	.72

Indexed in "Engineering Index" and Abstracted in "Nuclear Science Abstracts"

Published monthly at Mt. Royal and Guilford Aves., Baltimore, Md., for Academic Press Inc. 111 Fifth Avenue, New York 3, N. Y.

During 1960, Volumes 7 and 8 will be published. Price of each volume: \$19.50.

Subscription orders should be sent to the publishers.

Notice of change of address must be received two months prior to the date of issue. Include both old and new addresses.

For Member Subscriptions: Notice should be sent to the Secretary of the American Nuclear Society, John Crerar Library, 86 East Randolph Street, Chicago 1, Illinois.

For Non-member Subscriptions: Notice should be sent to the publishers.

Second-class mail postage paid at Baltimore, Md.

Advertising Representatives

Emery-Harford Publishing Associates 400 Madison Avenue New York, New York Jim Summers and Associates 35 East Wacker Drive Chicago 1, Illinois

Chris Dunkle and Associates 740 South Western Avenue Los Angeles 5, California

420 Market Street San Francisco 11, Calif.