

CONTENTS

RICHARD S. STONE, H. P. SLEEPER, JR., RALPH H. STAHL, AND GORDON WEST. Transient Behavior of TRIGA, a Zirconium-Hydride, Water-Moderated Reactor	255
W. R. CONKIE. Polynomial Approximations in Neutron Transport Theory	260
W. R. CONKIE. An Iterative Method in Neutron Transport Theory	267
LAWRENCE RUBY AND JOSEPH B. RECHEN. An Efficient Counting System for the Detection of Neutrons from Low-Yield Pulsed Neutron Sources	272
CARL E. WALTER. A Fuel Element for an Elevated-Temperature Critical Assembly	279
CHARLES ERWIN COHN. Errors in Reactivity Measurements Due to Photoneutron Effects	284
A. ROTENBERG, A. LAPIDUS, AND E. WETHERELL. A Monte Carlo Calculation of Thermal Utilization	288
ALAIN SOLA AND WILLIAM W. MANAGAN. Flux Perturbation Produced by Ion Chambers and Fission Chambers	294
Y. FUKAI, A. SHIMIZU, AND S. MIYAMOTO. Calculations of Flux Distributions in a Boiling Water Reactor	298
DAVID BURGREN. Flow Coastdown in a Loop After Pumping Power Cutoff	306
STANLEY C. FULTZ. The Time-Dependent Thermal Neutron Flux from a Pulsed Subcritical Assembly	313
G. C. BALDWIN. Kinetics of a Reactor Composed of Two Loosely Coupled Cores	320
CHARLES ZUCKER AND LEWIS HARING. Measuring the Release Time and Total Drop Time of a Control Rod	328
M. J. STEINDLER, D. V. STEIDL, AND R. K. STEUNENBERG. The Fluorination of Plutonium Tetrafluoride and Plutonium Dioxide by Fluorine	333
HENRI B. SMETS AND ELIAS P. GYFTOPOULOS. The Application of Topological Methods to the Kinetics of Homogeneous Reactors	341
ORRINGTON E. DWYER AND ALLEN M. ESHAYA. On the Removal of Volatile Fission Products from Uranium-Bismuth Reactor Fuels	350

Indexed in "Engineering Index"

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

During 1959, Volumes 5 and 6 will be published. Price of each volume: \$19.50.

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.