

CONTENTS

MELVIN REIER, FELIX OBENSHAIN, AND ROBERT L. HELLENS. The Age of Polonium-Beryllium Neutrons in Various Metal-Water Mixtures...	1
JAMES W. WADE. Neutron Age in Mixtures of D ₂ O and H ₂ O.....	12
M. J. NOWAK. The General Critical Reactor Equations.....	25
THOMAS R. BUMP AND RALPH W. SEIDENSTICKER. Analysis of Temperatures and Expansions Resulting From Exponential Power Changes in a Reactor.....	44
W. H. HARTLEY AND R. T. BAYARD. Control Rod Worth Studies on Seed and Blanket Reactors.....	65
H. A. MOREWITZ AND R. F. VALENTINE. A System of Obtaining and Reducing Neutron Flux Data from a Critical Assembly.....	73
DAVID BURGREN. Hydrodynamics of a Liquid Poison Scram System....	82
FRITZ W. MEZGER. Suppression of Neutron-Induced Activation Outside a Hydrogenous Shield.....	96
G. L. MONTET. Interstitial Compounds of Irradiated Graphite.....	112
LETTER TO THE EDITORS	
M. N. MOORE. Reactor Transfer Functions: Addendum.....	134
AMERICAN NUCLEAR SOCIETY NEWS.....	136
ANNOUNCEMENT.....	138

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 1958, Volumes 3 and 4 will be published. Price of each volume: \$12.50.

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 privileges authorized at Baltimore, Md.