

CONTENTS

EDITORIAL.....	i
P. A. OMBRELLARO AND F. D. FEDERIGHI. A Variational Procedure for Calculating Fast Group Constants.....	343
JAMES N. ANO. Fission Plate Power Measurement by a Transient-Temperature Method.....	357
P. VÉRTES. Some Problems Concerning the Theory of Pulsed Neutron Experiments.....	363
D. B. MACMILLAN AND M. L. STORM. Kinetics of Low Source Reactor Startups—Part III.....	369
Solvent Extraction Chemistry Symposium	
K. B. BROWN. Introduction.....	381
D. F. PEPPARD AND G. W. MASON. Some Mechanisms of Extraction of M(II), (III), (IV), and (VI) Metals by Acidic Organophosphorus Extractants.....	382
J. R. FERRARO AND D. F. PEPPARD. Structural Aspects of Organophosphorus Extractants and Their Metallic Complexes as Deduced from Spectral and Molecular Weight Studies.....	389
C. J. HARDY. Alkylphosphoric Acids and Their Complexes with Metals.....	401
C. F. BAES, JR. The Synergistic Effects in Organophosphate Extraction Systems.....	405
T. V. HEALY. Synergism with Thenoyl Trifluoroacetone in the Solvent Extraction of Metallic Species.....	413
J. M. FLETCHER AND C. J. HARDY. Extraction of Metal Nitrates by TBP·HNO ₃	421
L. L. BURGER. The Neutral Organophosphorus Compounds as Extractants.....	428
THOMAS H. HANDLEY. Extraction with Sulfur-Containing Organophosphorus Compounds....	440
DAVID DYRSSEN. The Use of Solvent Extraction Techniques in the Study of Chemical Equilibria.....	448
LETTERS TO THE EDITORS	
W. CIECHANOWICZ. A Comparison of the Transfer Function of the Internal Reactor Loop for the Cases of Both Distributed and Lumped Parameters.....	456
R. SCALETTAR. The Fuchs-Nordheim Model with Variable Heat Capacity.....	459
J. J. McINERNEY. Green's Function for a Bare Slab with Anisotropic Scattering.....	460
Book Reviews.....	463
Author Index.....	468
General Subject Index.....	470

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 1963, Volumes 15, 16, and 17 will be published. Price of each volume: \$21.00.

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,

244 East Ogden Avenue, Hinsdale, Illinois.

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

Second-class mail postage paid at Baltimore, Md.

Advertising Representatives

Jim Summers and Associates
35 East Wacker Drive
Chicago 1, Illinois

Chris Dunkle and Associates
740 South Western Avenue, Los Angeles 5, California or
420 Market Street, San Francisco 11, California