



CONTENTS

VOLUME 3 NO. 3 MARCH 1967/PAGES 137-200

NUCLEAR APPLICATIONS STAFF

LOUIS G. STANG, JR. *Editor*
DUDLEY THOMPSON *Associate Editor*
DORIAN STANG *Editorial Assistant*

ANS STAFF

Technical Publications and Production

JOHN GRAHAM *Senior Staff Editor*
RUTH FARMAKES *Assistant Staff Editor*
RICHARD HARRIS *Design and Production Editor*
MARY M. GRIFFITH *Art Editor*
EDITH SMITH *Copy Editor*
HELEN ANDERSON *Copy Editor*
JEAN BARR *Production Assistant*

Advertising

RICHARD R. QUINN *Advertising Sales Manager*
DENNIS J. IMBIOR *Midwest Sales Manager*
ROSEMARY HARVEY *Circulation Manager*

EDITORIAL ADVISORY BOARD

E. ALFRED BURRILL—S. H. BUSH
A. B. CHILTON—ERIC T. CLARKE
ROGER J. COE—YAUGHN CULLER
RALPH L. ELY, JR.—W. H. ESSELMAN
PAUL R. FIELDS—JOHN H. FRYE, JR.
DAVID B. HALL—JOSEPH M. HENDRIE
STEPHEN LAWROSKI—FORREST J. REMICK
S. SANDHAUS—MORTIMER A. SCHULTZ
EDWIN L. ZEBROSKI

ANS OFFICERS

SIDNEY SIEGEL *President*
RAEMER E. SCHREIBER *Vice President*
JOHN W. LANDIS *Treasurer*
OCTAVE J. DU TEMPLE *Executive Secretary*
CLARKE WILLIAMS *Director of Publications*

Address all manuscripts and editorial communications to the editorial offices, *Nuclear Applications*, 60 Rutherford Drive, Upton, New York 11973.

Nuclear Applications is published monthly by the American Nuclear Society, Incorporated, with executive and business offices at 244 East Ogden Avenue, Hinsdale, Illinois 60521, telephone 312 / 325-1991. Subscription rate is \$25/volume. It is printed in Danville, Illinois, and second-class postage is paid at Hinsdale, Illinois, and at additional mailing offices. Copyright © 1967 by the American Nuclear Society, Incorporated.

Statements made by authors of contributions to the various departments or of technical papers and notes do not necessarily reflect the viewpoint of the American Nuclear Society nor should their appearance herein be construed as tacit approval or endorsement by the Society. Abstracts appearing in *Nuclear Applications* may be freely republished anywhere any time.

TECHNICAL PAPERS AND NOTES



Extraction of Plutonium from Uranium-Plutonium Alloy with Uranium Trichloride / N. R. Chellew, R. K. Steunenberg - - - - - 142

A Reactivity Meter Using Passive Networks for Delayed-Neutron Groups / Arne J. W. Andersson - - 147



The Economics of UO₂ Fuel for Research Reactors / R. F. Lumb, J. MacPhee - - - - - 157



Postirradiation Creep and Stress Rupture of Hastelloy N / W. R. Martin, J. R. Weir 167



Nuclear Analysis of Gaseous-Core Nuclear Rockets / Thomas F. Plunkett - - - - - 178



Determination of Selenium in Amino Acids at the 0.1-ppm Level by Pulsed-Neutron Activation / Vera Maxia, M. A. Rollier - - - - - 187



A Technique to Determine Slow-Neutron Spectra from Foil Activations / R. H. Fulmer, T. F. Ruane - - - 191

DEPARTMENTS

COMMENTARY - - - - -	138
AUTHORS AND PAPERS - - - - -	139
LETTERS TO THE EDITOR - - - - -	141
CORRIGENDUM - - - - -	141
BOOK REVIEWS - - - - -	199