## NUCLEAR SCIENCE AND ENGINEERING®

VOLUME 73, NUMBER 3, MARCH 1980

## CONTENTS TECHNICAL PAPERS

225	A Numerical Study of Weakly Compressible Rotating Flows in a Gas Centrifuge	lwao Harada
242	The Effects of Sodium Entrainment and Heat Transfer with Two-Phase UO <sub>2</sub> During a Hypothetical Core Disruptive Accident	Michael L. Corradini, Warren M. Rohsenow, Neil E. Todreas
259	Neutron and Gamma-Ray Penetrations in Thick Iron	Yoshiaki Oka, Shigehiro An, Shigeru Kasai, Shun-ichi Miyasaka, Kinji Koyama
274	Homogenized Diffusion Approximations to the Neutron Transport Equation	Edward W. Larsen, R. P. Hughes
	TECHNICAL NOTES	
286	Parameter Estimation of Liquid-Metal Fast Breeder Reactor Simulation Experiments Using Univariate Auto- regressive Integrated Moving Average Modeling	M. I. Pekarsky, C. C. Meek, R. C. Doerner
289	Comments on Higher Order Generalized Perturbation Theory	A. Gandini
294	Multidimensional Space-Time Kinetics of a Heavy- Water-Moderated Nuclear Reactor	W. G. Winn, N. P. Baumann, C. E. Jewell
	LETTERS TO THE EDITOR	
301	Concrete Buildup Factors Based on the American National Standard for Flux-to-Dose-Rate Conversion	A. B. Chilton, R. W. Brown
301	Comment on "Concrete Buildup Factors Based on the American National Standard for Flux-to-Dose-Rate Conversion"	D. K. Trubey, M. E. Battat
.302	Polynomial Expression for the Neutron Escape Probability from an Absorbing Body	Hem Prabha Raghav
304	Reply to "Polynomial Expression for the Neutron Escape Probability from an Absorbing Body"	Yung-An Chao

## VOLUME 73, NUMBER 3, MARCH 1980

## **CONTENTS**

(Continued)

304	Comments on the Lyczkowski-Travis Drift-Flux Controversy	T. A. Porsching
306	Reply to "Comments on the Lyczkowski-Travis Drift- Flux Controversy	Robert W. Lyczkowski
	BOOK REVIEWS	
308	Energy From Heaven and Earth, Edward Teller	Alvin M. Weinberg
308	Nuclear Safeguards Analysis, E. Arnold Hakkila	Clement J. Rodden
311	CORRIGENDUM	
312	ANNOUNCEMENT OF CURRENT PUBLICATIONS	
317	VOLUME 73 AUTHOR AND SUBJECT INDEXES	