

NUCLEAR SCIENCE AND ENGINEERING®

VOLUME 77, NUMBER 1, JANUARY 1981

CONTENTS

TECHNICAL PAPERS

- | | | |
|----|---|---|
| 1 | Integral Transport Theory Formalism for Diffusion Coefficient Calculations in Wigner-Seitz Cells | <i>Pierre Benoist</i> |
| 13 | Interface and Source Problems by a Transport Theoretic P_N Approximation | <i>K. Ganguly, A. Sengupta</i> |
| 20 | Elastic Nuclear Plus Interference Cross Sections for Light-Charged Particles | <i>Sterrett T. Perkins,
Dermott E. Cullen</i> |
| 40 | Progress in Integral Data and Their Accuracy: Average Neutron Cross Sections in the Californium-252 Benchmark Field | <i>W. Mannhart</i> |
| 51 | Measurements of the Fast Neutron Emission Spectrum of Californium-252 by Means of Proton-Recoil Spectrometers | <i>H. Jasicek, F. Bensch</i> |
| 58 | Determination of the Capture Width of the 27.7-keV s -Wave Neutron Resonance in Iron-56 | <i>K. Wissak, F. Käppeler</i> |
| 71 | Computational Benchmark for Neutron Penetration in Iron | <i>J. S. Hendricks, L. L. Carter</i> |
| 84 | A Study of the Penetration of a Hot Liquid Pool into a Vertical Solid Surface | <i>Rouyentan Farhadieh</i> |
| 92 | On the Two-Dimensional Analysis of Fluid Flow and Heat Transfer in Rod Bundles with Arbitrary Arrangement | <i>Sun Wong, Kawei Chen</i> |

TECHNICAL NOTES

- | | | |
|-----|--|--|
| 107 | Neutron Utilization Parameter for Complex Coupled Systems | <i>Charles R. Marotta</i> |
| 110 | Fast-Neutron Total and Elastic- and Nonelastic-Scattering Cross Sections of Elemental Nickel | <i>A. B. Smith, P. T. Guenther,
J. F. Whalen</i> |

- 114 ANNOUNCEMENT OF CURRENT PUBLICATIONS