

# NUCLEAR SCIENCE AND ENGINEERING®

VOLUME 77, NUMBER 3, MARCH 1981

## CONTENTS

### TECHNICAL PAPERS

- |            |   |   |
|------------|---|---|
| <b>273</b> | A Model of Countercurrent Steam-Water Flow in Large Horizontal Pipes  | <i>Bart J. Daly,<br/>Francis H. Harlow</i>        |
| <b>285</b> | Sensitivity of Light Water Reactor Fuel Cycle Parameters and Costs to Uncertainties in Thermal Nuclear Data and Methods | <i>J. M. Ryskamp, D. R. Harris,<br/>M. Becker</i> |
| <b>297</b> | Event Sequences and Consequence Spectrum: A Methodology for Probabilistic Transient Analysis                            | <i>A. Amendola, G. Reina</i>                      |
| <b>316</b> | Generalized Perturbation Theory for Nonlinear Systems from the Importance Conservation Principle                        | <i>A. Gandini</i>                                 |

### TECHNICAL NOTES

- |            |   |  |
|------------|---|--|
| <b>344</b> | A Stability Analysis for Nuclear Reactor Systems  | <i>Trine-Yie Dawn</i>                                |
| <b>351</b> | Using Orthogonal Functions with a Finite Element Method for Approximating Even-Parity Neutron Flux in Slab Geometry | <i>B. A. Sławiński, A. K. Ziver,<br/>J. Galliara</i> |
| <b>354</b> | Stability Analysis for Integro-Differential Coupled-Core Reactor Models   | <i>M. Podowski</i>                                   |
| <b>360</b> | Effectiveness of an Adaptive Acceleration Method for Inner Iterations in Some Neutron Diffusion Codes               | <i>Toichiro Fujimura,<br/>Tasushi Matsui</i>         |
| <b>367</b> | A Semianalytic Method for the Solution of the Neutron Transport Equation in Plane and Spherical Geometries          | <i>J. K. Fletcher</i>                                |

- 373 ANNOUNCEMENT OF CURRENT PUBLICATIONS**