

CONTENTS / AUGUST 1983—VOL. 62, NO. 2

TECHNICAL PAPERS

CHEMICAL PROCESSING

- 133** The Effect of Salt Composition on Reductive Extraction of Some Typical Elements from Molten LiF-BeF₂ Salt into Liquid Bismuth / *Hirotake Moriyama, Kunimitsu Yajima, Yasunobu Tominaga, Kimikazu Moritani, Jun Oishi*

NUCLEAR FUELS

- 139** The Current Status and Perspectives of Fissile Material Availability in the World Through the Year 2000 / *John Jeffrey Stobbs, Antonio Matteo Taormina*
- 145** Aqueous Corrosion of Uranium Aluminide Fuel / *Krishna Vinjamuri, Richard R. Hobbins*

RADIOACTIVE WASTE MANAGEMENT

- 151** The Effects of Surface Area to Solution Volume on Waste Glass Leaching / *L. R. Pederson, C. Q. Buckwalter, G. L. McVay*

HEAT TRANSFER AND FLUID FLOW

- 159** Transient Analysis of the Three Mile Island Unit 2 Pressurizer System / *Benaissa Baggoura, William R. Martin*
- 172** Safety Analysis of the Reactivity Transients Resulting from Water Ingress into a High-Temperature Pebble Bed Reactor / *Rahim Nabbi, Wilfried Jahn, Gerhard Meister, Werner Rehm*

ECONOMICS

- 190** Analysis of Decommissioning Costs for Nuclear Power Reactors / *David F. Greenwood, Richard K. Westfahl, James W. Rymsha*

(Continued)

ON THIS COVER

This month's cover is taken from a figure in the paper by K. Takeuchi and N. Sasamoto, showing a portion of the plan configuration of an (R, θ) model of $\frac{1}{4}$ core symmetry for a PWR.

CONTENTS / AUGUST 1983—VOL. 62, NO. 2

(Continued)

ANALYSES

- 207 Analysis of Detailed Neutron Fluxes in a PWR Pressure Vessel by Two- and Three-Dimensional PALLAS Transport Codes / *Kiyoshi Takeuchi, Nobuo Sasamoto*
- 222 A Finite Difference Treatment of Differential Equation Systems with Widely Differing Time Constants / *G. Ronald Dalton, Michael T. Gamble*
- 227 System Preparation and Fast Neutron Spectra Measurement in a Graphite Stack / *Alex Tsechanski, Gad Shani*

TECHNICAL NOTE

FUEL CYCLES

- 238 Modified Fuel Assembly Design for Pressurized Water Reactors with Improved Fuel Utilization / *Alex Galperin, Yigal Ronen*

DEPARTMENTS

- 127 Authors
- 243 Book Reviews
- 245 Corrigendum