

TECHNICAL PAPERS

FISSION REACTORS

- 1 A Study of the Structural Integrity of the Core Support Structure of a Fast Breeder Reactor / *Masahiro Ueta, Masakazu Ichimiya, Hiroshi Hirayama, Masayuki Asano, Hisaaki Ikeuchi, Katsuhisa Sekine, Tetsuhiko Kodama, Kenichiro Sato*

NUCLEAR REACTOR SAFETY

- 13 Operational Margin Monitoring System for Boiling Water Reactor Power Plants / *Shigeki Fukutomi, Yukio Takigawa, Hideaki Namba*
- 25 Evaluation of the Loss of Residual Heat Removal Systems in Pressurized Water Reactors with U-Tube Steam Generators / *Leonard W. Ward*
- 39 A Long-Term MAAP 3.0B Analysis of a Severe Anticipated Transient Without Scram Accident in a Boiling Water Reactor / *Min Lee, Ein-Chun Wu*
- 52 Experiments to Investigate the Effect of Flight Path on Direct Containment Heating / *Michael D. Allen, Martin M. Pilch, Richard O. Griffith, Robert T. Nichols*

MATERIALS

- 70 A New Pipe Wall Thinning Inspection System / *Houlung Lee, Edward S. Kenney*
- 79 A Comparison of the BUGLE-80, SAILOR, and ELXSIR Neutron Cross-Section Libraries for PWR Pressure Vessel Surveillance Dosimetry and Shielding Applications / *Hassan S. Basha, Michael P. Manahan, Sr.*

HEAT TRANSFER AND FLUID FLOW

- 97 Identification of Flow Patterns by Neutron Noise Analysis During Actual Coolant Boiling in Thin Rectangular Channels / *Robert Kozma, Hugo van Dam, J. Eduard Hoogenboom*
- 111 A Study of RELAP5/MOD2 and RELAP5/MOD3 Predictions of a Small-Break Loss-of-Coolant Accident Simulation Conducted at the ROSA-IV Large-Scale Test Facility / *Sandra M. Sloan, Yassin Hassan*

(Continued)

ON THIS COVER

This month's cover is based on Fig. 3 of the paper by Kozma et al., which depicts a reactor core map.

CONTENTS / OCTOBER 1992–VOL. 100, NO. 1

(Continued)

REACTOR OPERATIONS

- 125 Fuzzy Logic Control of Steam Generator Water Level in Pressurized Water Reactors / *Cheng Chung Kuan, Chaung Lin, Chang Chia Hsu*

TECHNICAL NOTE

HEAT TRANSFER AND FLUID FLOW

- 135 A Numerical Performance Study of the PGR Method Applied to Nuclear Reactor Heat Transfer Calculations / *Paul E. Murray*

DEPARTMENT

- 141 Letters to the Editor