

TECHNICAL PAPERS

FISSION REACTORS

- 151 Conceptual Designs of Epithermal Neutron Beams for Boron Neutron Capture Therapy from Low-Power Reactors / *Hungyuan B. Liu, Robert M. Brugger*
- 157 Development and Comparison of a TOPAZ-II System Model with Experimental Data / *Dmitry V. Paramonov, Mohamed S. El-Genk*
- 171 An Integrated Model of the TOPAZ-II Electromagnetic Pump / *Mohamed S. El-Genk, Dmitry V. Paramonov*
- 181 Characteristics of the Flow-Controlled Accumulator / *Tadashi Shiraishi, Hisato Watakabe, Nobuo Nakamori, Kozo Tabuchi, Yoji Takayama, Takayoshi Sugizaki*

NUCLEAR REACTOR SAFETY

- 191 RELAP5/MOD3 Simulation of the Loss of the Residual Heat Removal System During a Midloop Operation Experiment Conducted at the ROSA-IV Large-Scale Test Facility / *Yassin A. Hassan, Sibashis S. Banerjee*

NUCLEAR FUEL CYCLES

- 207 Strength of Silicon Carbide Layers of Fuel Particles for High-Temperature Gas-Cooled Reactors / *Paul A. Lessing, Ronald J. Heaps*
- 235 Preliminary Neutronics Investigation of the Delayed Neutron Nondestructive Assay of an Integral Fast Reactor Waste Canister / *Cheng-Wei Wu, Douglass L. Henderson, Edgar F. Bennett*

MATERIALS

- 256 A Modeling Study of Parameters Controlling Local Concentration Processes in Pressurized Water Reactor Steam Generators / *Peter J. Millett, James M. Fenton*

HEAT TRANSFER AND FLUID FLOW

- 266 Effect of External Cooling on the Thermal Behavior of a Boiling Water Reactor Vessel Lower Head / *Hyunjae Park, V. K. Dhir, William E. Kastenberg*

(Continued)

ON THIS COVER

This month's cover is an artist's abstraction, which is drawn from Figs. 4, 5, and 18 in the paper by Lessing and Heaps.

CONTENTS / NOVEMBER 1994–VOL. 108, NO. 2

(Continued)

REACTOR CONTROL

- 283 Error Prediction for a Nuclear Power Plant Fault-Diagnostic Advisor Using Neural Networks / *Keehoon Kim, Eric B. Bartlett*

DEPARTMENT

- 298 Book Review