

CONTENTS / MAY 1994-VOL. 106, NO. 2

TECHNICAL PAPERS

NUCLEAR REACTOR SAFETY

- 139 Evaluation of a Severe Accident Management Strategy for Boiling Water Reactors Drywell Flooding / Donghan Yu, Leiming Xing, William E. Kastenberg, David Okrent
- 155 Mean Importance Measures for Groups of Events in Fault Trees / F. Eric Haskin, Min Huang, M. Kent Sasser, Desmond W. Stack
- 168 Analysis of the Chemical Behavior of Iodine in the Suppression Tank of the LOFT Facility During Experiment LP-FP-2 with IODE and IMPAIR-2/M / Luis E. Herranz, Jesús Polo

MATERIALS

177 Interaction of Nickel Ions with Magnetite Particles in High-Temperature Water / Kostadin A. Dinov, Kenkichi Ishigure, Daisuke Hiroishi, Chihiro Matsuura

HEAT TRANSFER AND FLUID FLOW

- 186 Modeling of Bubbly and Annular Two-Phase Flow in Subchannel Geometries with BACCHUS-3D/TP / Maurizio Bottoni, Robert W. Lyczkowski
- 202 Theoretical Modeling of Forced Convection Condensation of Steam in a Vertical Tube in the Presence of a Noncondensable Gas / Mansoor Siddique, Michael W. Golay, Mujid S. Kazimi

REACTOR CONTROL

- 216 Optimal Reliable Control System Design for Steam Generators in Pressurized Water Reactors / Wencheng Wu, Chaung Lin
- 225 Accelerating Learning of Neural Networks with Conjugate Gradients for Nuclear Power Plant Applications / Jaques Reifman, Javier E. Vitela
- 242 Fuzzy Power Control Algorithm for a Pressurized Water Reactor / Yung-Joon Hah, Byong-Whi Lee

(Continued)

CONTENTS / MAY 1994-VOL. 106, NO. 2

(Continued)

TECHNICAL NOTES

HEAT TRANSFER AND FLUID FLOW

254 Low-Power Experimental Study of the Demand Surface for Annular Geometry Fuel Elements with Upflow of Coolant / Allen C. Smith, James E. Blake, Michael T. Childerson, Ted R. Ohrn, Robert M. Privette

RADIATION PROTECTION

261 Film Dosimeters Based on Methylene Blue and Methyl Orange in Polyvinyl Alcohol / Woon Hyuk Chung, Arne Miller