

CONTENTS / DECEMBER 1992-VOL. 100, NO. 3

TECHNICAL PAPERS

FISSION REACTORS

- 271 Decay Heat Removal by Natural Circulation in a 550-kW(electric) SP-100 Power System for a Lunar Outpost / Mohamed S. El-Genk, Huimin Xue
- 287 Theoretical and Experimental Analysis of the Bistable Convection Loop for Liquid-Metal-Cooled Reactor Emergency Core Cooling / G. Anand, R. N. Christensen
- 295 Knowledge Representation for Automated Boiling Water Reactor Plant Startup / Koichi Sekimizu, Tsuneyasu Araki, Seishiro Kawakami

ENRICHMENT AND REPROCESSING SYSTEMS

310 Behavior of Mercury in High-Temperature Vitrification Processes / Ronald W. Goles, Langdon K. Holton, Jr., Gary J. Sevigny

RADIOACTIVE WASTE MANAGEMENT

322 A Radioactivity Assay Method Using Computed Tomography / Tetsuo Goto, Hiroaki Kato

HEAT TRANSFER AND FLUID FLOW

- 331 Effect of Outside Cooling on the Thermal Behavior of a Pressurized Water Reactor Vessel Lower Head / Hyunjae Park, Vijay K. Dhir
- 347 Two-Phase Flow and Heat Transfer in a Once-Through Steam Generator During Auxiliary Feedwater Injection / B. K. Kamboj, S. M. Ghiaasiaan, S. I. Abdel-Khalik

REACTOR OPERATIONS

- 361 Application of Optimal Control Theory to a Load-Following Pressurized Water Reactor / Man-Sung Yim, John M. Christenson
- 378 On-Line Diagnostic Method with Automated Noise-Signature Learning / Tetsuo Tamaoki, Masuo Sato, Ryoichi Takahashi

TECHNICAL NOTES

FISSION REACTORS

390 Molten Salt Reactors for Burning Dismantled Weapons Fuel / *Uri Gat, J. R. Engel, H. L. Dodds*

(Continued)

CONTENTS / DECEMBER 1992-VOL. 100, NO. 3

(Continued)

ENRICHMENT AND REPROCESSING SYSTEMS

395 Mixed RuO₂/TiO₂/PtO₂-Coated Titanium Anodes for the Electrolytic Dissolution of Nuclear Fuels / *U. Kamachi Mudali, R. K. Dayal, J. B. Gnanamoorthy*

DEPARTMENTS

- 403 Technical Reviewers
- 407 Volume 100 Indexes
- v Volume 100 Contents