

CONTENTS / DECEMBER 1987-VOL. 79, NO. 3

TECHNICAL PAPERS

FISSION REACTORS

- 249 A Remote Maintenance Robot System for a Pulsed Nuclear Reactor / William M. Davidson, Alan K. Morimoto, Mary M. Moya, J. Lee Schoeneman, Siegfried Thunborg, Gregory P. Starr
- 260 A Digital Computer Model for Predicting Reactor Coolant Pump Behavior / Samir M. Sami, C. Tran
- 274 Prompt-Neutron Decay Constant Estimation at Full-Power Operation / Mochen Hsu
- 284 A Real-Time Expert System for Nuclear Power Plant Failure Diagnosis and Operational Guide / Norio Naito, Akira Sakuma, Kei Shigeno, Nobuyuki Mori
- 297 Pool Dynamics of Natural-Convection-Cooled Research Reactors / Jae-Joo Ha, Tunc Aldemir

NUCLEAR SAFETY

311 Site Selection of a Dual Purpose Nuclear Power Plant in Saudi Arabia / Fahmy M. Hussein, Mohamed A. Obeid, Khalid S. El-Malahy

NUCLEAR FUELS

322 Calculational Assessment of the Measurability of Key Radionuclides for Severely Failed Nuclear Power Plant Fuel / Stephen E. Binney, Richard D. Harris

RADIOACTIVE WASTE MANAGEMENT

- 328 Melting of Uranium-Contaminated Metal Cylinders by Electroslag Refining / Tatsuhiko Uda, Yoshihiro Ozawa, Hajime Iba
- 338 Modeling Interaction of Deep Groundwaters with Bentonite and Radionuclide Speciation / Hans Wanner
- 348 Empirical Correlations from Waste Grout Formulation Data / Othar K. Tallent, Earl W. McDaniel, Karen E. Dodson, Terry T. Godsey

(Continued)

ON THIS COVER

This month's cover is taken from a figure in the paper by H. Wanner.

CONTENTS / DECEMBER 1987-VOL. 79, NO. 3

(Continued)

359 Mathematical Modeling of the Chemical Decontamination of Boiling Water Reactor Components / Alexander P. Murray

HEAT TRANSFER AND FLUID FLOW

371 A Study of Flow Through a Fracture Network Described by Statistically Distributed Properties / Carol Braester, Roger Thunvik

TECHNICAL NOTE

FISSION REACTORS

377 A Design of the Liquid-Metal Reactor Having an Almost Constant Reactivity / Hyong Chol Kim, Ming-Yuan Hsiao, Samuel H. Levine

DEPARTMENTS

- 243 Authors
- 382 Technical Reviewers
- 386 Volume 79 Indexes
- v Volume 79 Contents