

nuclear technology®

CONTENTS / MARCH 1991 -VOL. 93, NO. 3

OVERVIEW

RADIOACTIVE WASTE MANAGEMENT

- 263 Radioactive Waste Management / *Nicholas Tsoulfanidis, Robert G. Cochran*

TECHNICAL PAPERS

FISSION REACTORS

- 305 A High-Breeding Fast Reactor with Fission Product Gas Purge/Tube-in-Shell Metallic Fuel Assemblies / *Toru Hiraoka, Kiyoshi Sako, Hideki Takano, Takeshi Ishii, Mitsuru Sato*
- 330 Reactor Design of the Advanced Neutron Source / *John M. Ryskamp, Douglas L. Selby, R. Trenton Primm III*

NUCLEAR REACTOR SAFETY

- 350 Control Room Habitability During Severe Accidents / *Raymond P. Siu*

NUCLEAR FUEL CYCLES

- 357 Studies of Neutron Shielding Properties of Ilmenite-Magnetite Concrete Using a ^{252}Cf Source / *S. I. Bhuiyan, F. U. Ahmed, A. S. Mollah, M. A. Rahman*

ENRICHMENT AND REPROCESSING SYSTEMS

- 362 Numerical Study of Hydrodynamics in Pulsed Solvent Extraction Columns Using the DYNAC Code / *Masahiro Nabeshima*
- 376 Purex Processing of 10-Year Light Water Reactor Fuel: Flow Sheet / *Okan H. Zabunoglu, Bernard I. Spinrad*

RADIOACTIVE WASTE MANAGEMENT

- 382 A Method to Evaluate the Maximum Allowable Temperature of Spent Fuel in Dry Storage During a Postulated Accident / *Masami Mayuzumi, Takeo Onchi*

(Continued)

ON THIS COVER

This month's cover is a composite of Figs. 11, 25, 26, and 27 from the paper by Hiraoka et al.

CONTENTS / MARCH 1991 –VOL. 93, NO. 3

(Continued)

MATERIALS

- 389 Flux and Fluence Determination Using the Material Scrapings Approach / *Michael P. Manahan, Sr., Hassan S. Basha*
- 399 High-Temperature Corrosion Testing of Alumina and Zirconia in Uranium Hexafluoride Environment / *Simon C. P. Wang, Clayton Collins, Samim Anghaie, and E. Dow Whitney*

TECHNICAL NOTE

MATERIALS

- 412 A Step-Heating Dilatometry Method to Measure the Change in Length Due to Annealing of a SiC Temperature Monitor / *Toyohiko Yano, Kazunari Sasaki, Tadashi Maruyama, Takayoshi Iseki, Masahiko Ito, Shoji Onose*

DEPARTMENTS

- 416 Volume 93 Indexes
- v Volume 93 Contents