

nuclear technology®

CONTENTS / FEBRUARY 1979—VOL. 42, NO. 2

THORIUM FUEL CYCLE IN A BREEDER ECONOMY

TECHNICAL PAPERS

- 123 Reactor Physics Parameters of Alternate Fueled Fast Breeder Reactor Core Designs / *D. R. Haffner, R. W. Hardie*
- 133 Performance of Thorium-Fueled Fast Breeders / *D. R. Marr, D. A. Cantley, J. C. Chandler, D. C. McCurry, R. P. Omberg*
- 144 The Denatured Thorium Cycle—An Overview / *Carol A. Sege, Saul Strauch, Ronald P. Omberg, Irving Spiewak*
-

REACTORS

- 150 Pulsed Reactivity Measurements of Large ^{235}U -Al Castings in H_2O / *D. J. Pellarin, J. L. Jarriel*

REACTOR SITING

- 155 Rock Cavity Construction of a Nuclear Power Plant—A Case Study / *P. Chr. Løken, J. Bakke, I. Gløersen*

CHEMICAL PROCESSING

- 163 Preparation of Uranium Kernels by an External Gelation Process / *Paul Naefe, Erich Zimmer*
- 172 Removal of Radiocobalt Ion in Waste Water by Oxine-Impregnated Activated Charcoal. Part II: Column Experiments / *Kenji Motojima, Enzo Tachikawa, Hideo Kamiyama*

RADIOACTIVE WASTE

- 180 A Neutronic Assessment of Strontium-90 Transmutation in Fusion Reactors / *T. A. Parish*

(Continued)

ON THIS COVER

This month's cover is taken from a figure in the paper by L. A. Lawrence et al., courtesy of Hanford Engineering Development Laboratory.

CONTENTS / FEBRUARY 1979—VOL. 42, NO. 2

(Continued)

MATERIALS

- 195 The Effects of Stoichiometry on Cladding Attack in $\text{UO}_2\text{-PuO}_2$ / *L. A. Lawrence, D. C. Hata, J. W. Weber*
- 207 Some Electron Microprobe Analysis Results Concerning the Interaction Between Uranium-Plutonium Mixed-Oxide Fuel and Stainless-Steel Cladding / *C. T. Walker, S. Pickering*
- 216 Experimental Parameter Investigations on the Tribological Behavior of Stellite 6 in Liquid Sodium / *Eugen Wild, Klaus J. Mack*

DEPARTMENTS

- 119 Authors
- 224 Book Reviews