

CONTENTS / JANUARY 1979—VOL. 42, NO. 1

TECHNICAL PAPERS

REACTORS

- 5 Summary of the ALARA Nature of Design Effluents from the Clinch River Breeder Reactor Plant / *Kenneth L. Ferguson*
- 13 Assessment of Criticality Safety / *R. C. Lloyd, S. W. Heaberlin, E. D. Clayton, R. D. Carter*
- 22 A Parametric Study of a Lithium-Cooled Tokamak Blanket / *J. Chao, B. B. Mikić, N. E. Todreas*
- 34 Preliminary Design and Neutronic Analysis of a Laser Fusion Driven Actinide Waste Burning Hybrid Reactor / *D. H. Berwald, J. J. Duderstadt*

REACTOR SITING

- 51 Decision Table Development and Application to the Construction of Fault Trees / *S. L. Salem, J. S. Wu, G. Apostolakis*

CHEMICAL PROCESSING

- 65 Proposed Extension of Raschig Ring Standard to Low Enriched Uranium Fuels / *N. Ketzlach*

MATERIALS

- 71 Proton Simulation of Irradiation-Induced Creep / *E. K. Opperman, J. L. Straalsund, G. L. Wire, R. H. Howell*
- 82 Low Cycle Fatigue Behavior of Types 304 and 316 Stainless Steel Tested in Sodium at 550°C / *G. J. Zeman, D. L. Smith*

ISOTOPES SEPARATION

- 90 Garden Hose Separation of Gaseous Isotopes. Part II: Supersonic Accelerations / *Chia-Gee Wang, Anthony G. M. Davis*

(Continued)

ON THIS COVER

This month's cover is taken from the paper by E. K. Opperman et al. and shows a schematic illustration of the creep machine.

CONTENTS / JANUARY 1979—VOL. 42, NO. 1

(Continued)

ANALYSIS

- 102 A Solvent Extraction-Liquid Scintillation Method for Assay of Uranium and Thorium in Phosphate-Containing Material / *Edward J. Bouwer, John W. McKlveen, W. J. McDowell*

DEPARTMENTS

- 1 Authors
- 112 Book Reviews