

nuclear**technology**[®]

CONTENTS / JULY 1976—VOL. 30, NO. 1

TECHNICAL PAPERS

REACTORS

- 5 Uranium-233 Breeding and Neutron Multiplying Blankets for Fusion Reactors / *Andrew G. Cook, James A. Maniscalco*
- 12 On the Use and Influence of Gamma Radiation in Reactor Noise Measurements / *Bruno Bärts*

REACTOR SITING

- 24 The Development of an Environmental Monitoring System for the Continuous Detection of Low-Level Radioactive Gases / *R. H. Jabs, W. A. Jester*

FUELS

- 33 Technological Development Concerning the Gas-Cooled Fast Breeder Reactor Test Bundle for the Irradiation Test in the Helium Loop at Mol / *M. Peehs, P. Rau*

RADIOACTIVE WASTE

- 47 Procedure for Determining Leachabilities of Radioactive Waste Forms / *J. A. Kelley, R. M. Wallace*

MATERIALS

- 52 Interrelationships Between Creep Life Criteria for Four Nuclear Structural Materials / *M. K. Booker, V. K. Sikka*
- 65 Radiative Heat Transfer in Molten UO_2 Based on the Rosseland Diffusion Method / *Edward E. Anderson*
- 71 A Simple Method for Calculations of Steady-State Creep Rates in Nonconservative Plastic Deformation / *G. L. Wire, J. L. Straalsund*
- 77 Instrumented Fast-Reactor Irradiation of Boron Carbide Pellets / *A. P. Pitner*

(Continued)

ON THIS COVER

This month's cover is a design by our artist and means whatever the observer beholds.

CONTENTS / JULY 1976—VOL. 30, NO. 1

(Continued)

TECHNICAL NOTE

RADIOACTIVE WASTE

- 86** Volume Reduction of Plutonium-Contaminated Soil / *J. H. Horton, E. L. Albenesius*

DEPARTMENTS

- 1** Authors
- 89** Book Reviews
- 94** Letter to the Editor