

nuclear technology®

CONTENTS / JANUARY 1985—VOL. 68, NO. 1

TECHNICAL PAPERS

FISSION REACTORS

- 7 Reduction in Reactor Vessel Irradiation Through Fuel Management / *Charles W. Bagnal, Jr., Gerard P. Cavanaugh, Robert P. Harris, Regis A. Matzie, Laszlo B. Tarko*
- 18 Reducing the Cobalt Inventory in Light Water Reactors / *Howard Ocken*

NUCLEAR SAFETY

- 29 Shielding Factors for Gamma Radiation from Activity Deposited on Structures and Ground Surfaces / *Per Hedemann Jensen*

NUCLEAR FUELS

- 40 Postirradiation Behavior of UO₂ Fuel II: Fragments at 175 to 275°C in Air / *Ian J. Hastings, Elio Mizzan, Alan M. Ross, John R. Kelm, Real J. Chenier, D. H. Rose, J. Novak*
- 48 The Sodium-Bonding Pin Concept for Advanced Fuels. Part III: Calculations of the Swelling Performance / *Claudio Ronchi, Jacques van de Laar, Hubert Blank*

RADIOACTIVE WASTE MANAGEMENT

- 66 Incineration of Ion Exchange Resins Using Concentric Burners / *Tetsuo Fukasawa, Koichi Chino, Osamu Kuriyama, Fumio Kawamura, Hideo Yusa*
- 73 A Simple Probabilistic Risk Analysis for High-Level Waste Repositories / *Bernard L. Cohen*

HEAT TRANSFER AND FLUID FLOW

- 77 ROSA-III Double-Ended Break Test Series for a Loss-of-Coolant Accident in a Boiling Water Reactor / *K. Tasaka, M. Suzuki, Y. Anoda, Y. Koizumi, T. Yonomoto, H. Kumamaru, H. Nakamura, M. Shiba*

(Continued)

ON THIS COVER

This month's cover is taken from a figure in the paper by P. H. Jensen and shows a vertical cross section for calculation of the indoor dose rate from activity deposited on a roof.

CONTENTS / JANUARY 1985–VOL. 68, NO. 1

(Continued)

ANALYSES

- 94 Neutron Radiography with a Sealed-Tube Neutron Generator in a Hot Laboratory Water Pool at Nagoya University / *Genichi Matsumoto, Soichi Doi, Kohei Ohkubo, Yasushi Ikeda*

TECHNICAL NOTE

FISSION REACTORS

- 102 Development of Nuclear Power Plant Noise Diagnostics into a Process-Measuring Method / *Günther Hessel, Hans-Erich Köppen, Peter Liewers, Peter Schumann, Frank-Peter Weiß*

DEPARTMENTS

- 1 Authors
111 Corrigendum