

DEVELOPMENT OF NUCLEAR GAS CLEANING AND FILTERING TECHNIQUES

- 7 Editor's Note / *William F. Vogelsang*
- 9 Preface: Development of Nuclear Gas Cleaning and Filtering Techniques /
Jürgen G. Wilhelm

TECHNICAL PAPERS

- 11 High-Strength High-Efficiency Particulate Air Filters for Nuclear Applica-
tions / *Volker Rüdinger, Craig I. Ricketts, Jürgen G. Wilhelm*
- 30 Application of Circular Filter Inserts / *R. P. Pratt, B. L. Stewart, D. Lough-
borough*
- 40 Filtered Venting for German Power Reactors / *H.-G. Dillmann, H. Pasler,
J. G. Wilhelm*
- 50 Aspects of the Increase in Pressure Drop of High-Efficiency Particulate Air
Filters Under Fog Conditions / *Craig I. Ricketts, Volker Rüdinger, Jürgen G.
Wilhelm*
- 66 Off-Gas Cleaning in an FRG Reprocessing Plant / *Jürgen Furrer, Walter
Weinländer*

FISSION REACTORS

- 77 Conceptual Design of a Medical Reactor for Neutron Capture Therapy /
William A. Neuman, James L. Jones
- 93 Power Flattening in a Catalyzed Deuterium-Deuterium Fusion-Driven Hybrid
Blanket Using Nuclear Waste Actinides / *Sümer Şahin*
- 106 Epithermal Neutron Beam Design for Neutron Capture Therapy at the Power
Burst Facility and the Brookhaven Medical Research Reactor / *Floyd J.
Wheeler, D. Kent Parsons, Brian L. Rushton, David W. Nigg*

(Continued)

ON THIS COVER

This month's cover is taken from Fig. 1 in the paper by
Chung Lin.

CONTENTS / OCTOBER 1990–VOL. 92, NO. 1

(Continued)

RADIOACTIVE WASTE MANAGEMENT

- 118 An Automatic Control Rod Programming Method for a Boiling Water Reactor / *Chaung Lin*

RADIOISOTOPES AND ISOTOPE SEPARATION

- 127 A $^3\text{He}^{++}$ Radio-Frequency Quadrupole Accelerator for Positron Emission Tomography / *Ali E. Dabiri, William K. Hagan, Donald A. Swenson, Kenneth A. Krohn*

HEAT TRANSFER AND FLUID FLOW

- 134 Analysis of a Fluid-Mechanic Model of a Horizontal Tee-Junction / *Yin-Pang Ma, Bau-Shei Pei, Wei-Keng Lin, Yih-Yun Hsu*
- 141 Analysis of a Nuclear Power Plant Using RELAP5/MOD2 with Modified Bundle Heat Transfer Correlations / *Yassin A. Hassan, Parvez Salim*

DEPARTMENTS

- 1 Authors
- 150 Book Reviews