

CONTENTS / SEPTEMBER 1976—VOL. 30, NO. 3

URANIUM RESOURCES

- 223 Preface: Uranium Resources / *J. S. Tulenko, V. O. Uotinen*

TECHNICAL PAPERS

- 224 Uranium Resources—Are They Adequate? / *Robert D. Nininger*
- 232 U₃O₈ Supply in Technical and Commercial Transition / *P. F. Schutt, J. S. Hobbs*
- 237 The Changing Scene for Uranium in Canada / *Noel O'Brien*
- 242 Uranium: The Market and Adequacy of Supply / *Bernard H. Cherry*

REACTORS

- 246 Transient Hydraulics and Heat Transfer in Turbulent Flow / *Hiroshi Kawamura*
- 256 Safety Advantages of Prestressed Concrete Reactor Vessels / *Zdeněk P. Bažant*
- 261 A Tokamak Experimental Power Reactor / *W. M. Stacey, Jr., V. A. Maroni, J. R. Purcell, M. A. Abdou, P. J. Bertoncini, J. N. Brooks, J. B. Darby, Jr., K. Evans, Jr., J. A. Fasolo, R. L. Kustom, J. S. Moenich, J. S. Patten, D. L. Smith, H. C. Stevens, S. T. Wang*
- 299 Theoretical and Experimental Dynamic Analysis of the H. B. Robinson Nuclear Plant / *T. W. Kerlin, E. M. Katz, J. G. Thakkar, J. E. Strange*

CHEMICAL PROCESSING

- 317 Removal of Radioiodine from Gas Streams by Electrolytic Scrubbing / *J. C. Mailen, D. E. Horner*
- 325 Use of Chemical Equilibrium Data to Calculate Iodex Column Operations / *J. C. Mailen*

FUELS

- 333 Velocity Measurements in the Subchannel of the Wire-Spaced Subassembly / *Toshihide Ohtake, Shinichi Uruwashii, Keiichi Takahashi*

(Continued)

ON THIS COVER

This month's cover is a perspective view of the Argonne Tokamak Experimental Power Reactor courtesy of W. M. Stacey, Jr. et al.

CONTENTS / SEPTEMBER 1976—VOL. 30, NO. 3

(Continued)

- 350** Neutron Spectrum and Radial Power Distribution Measurements in a TRIGA Reactor Fuel Element / *Walter L. Weaver III, Marvin E. Wyman, Barclay G. Jones*
- 361** Cladding Ovalities in Advanced Liquid-Metal Fast Breeder Reactor Fuel Elements / *Jerry F. Kerrisk, John O. Barner, Roy L. Petty*

MATERIALS

- 376** Swelling and Microstructural Changes in Irradiated Vanadium Alloys / *J. Bentley, F. W. Wiffen*
- 385** Grain Boundary Penetration Kinetics of Nitrided Type 304L Stainless Steel / *J. A. Reeves, Jr., D. L. Olson, W. L. Bradley*
- 390** Influence of Section Thickness on Fatigue Crack Growth in Type 304 Stainless Steel / *Paul Shahinian*

INSTRUMENTS

- 398** Fast-Neutron Hodoscope at TREAT: Data Processing, Analysis, and Results / *A. De Volpi, R. R. Stewart, J. P. Regis, G. S. Stanford, E. A. Rhodes*
- 422** Evaluation of Initial Loading Counting Rate Data from Experiments with the Mock-Up Core for the Fast Flux Test Facility / *J. T. Mihalczko, G. C. Tillet, D. L. Selby*

TECHNICAL NOTE

REACTORS

- 434** Neutron Downscattering in Laser-Induced Fusioning Plasmas / *Finis H. Southworth, Hugh D. Campbell*

DEPARTMENTS

- 215** Authors
- 437** Book Reviews
- 441** Letters to the Editor
- 443** Volume 30 Indexes
- iii** Volume 30 Contents