CONTENTS / JUNE 2014 — VOL. 186, NO. 3

TECHNICAL PAPERS

FISSION REACTORS

305  Assessment of MICROX-2 Code with New ENDF/B-VII Release 0 Master Libraries / Jia (Jason) Hou, Hangbok Choi, Kostadin Ivanov

317  Heterogeneous Cores for Implementation of Thorium-Based Fuels in Heavy Water Reactors / Blair P. Bromley, Bronwyn Hyland

REACTOR SAFETY


FUEL CYCLE AND MANAGEMENT

353  Fuel Management of PWR Cores with Silicon Carbide Cladding / Jacob Dobiesky, Joshua Richard, Edward E. Pilat, Mujid S. Kazimi, David M. Carpenter

378  Uranium Startup Fast Reactors with Metal Fuel Using Once-Through Fuel Cycle / T. Fei, M. J. Driscoll, E. Shwageraus

390  A Core Design Study on the Fuel Displacement Options for an Effective Transition Between Breakeven and TRU Burning Sodium-Cooled Fast Reactors / Sang Ji Kim, Pham Nhu Viet Ha, Jae Yong Lim, Won Sik Yang

403  Quantitative NDA Measurements of Multiactinide Oxide Fuels / Braden Goddard, William Charlton, Paolo Peerani

RADIATION TRANSPORT AND PROTECTION

415  Predicting Concrete Roadway Contribution to Gamma-Ray Background in Radiation Portal Monitor Systems / Christopher M. Ryan, Craig M. Marianno, William S. Charlton, Alexander A. Solodov, Ronald J. Livesay, Braden Goddard

DEPARTMENTS

427  Volume 186 Indexes

v  Volume 186 Contents