

169 A Memorial to Dr. Roy Post / *Nicholas Tsoulfanidis*

TECHNICAL PAPERS

FISSION REACTORS

170 Study on Leak Rate of Gas Medium in Leak-Before-Break Technique—I: Experimental Studies / *Zhengming Zhang, Shuyan He*

178 Study on Leak Rate of Gas Medium in Leak-Before-Break Technique—II: Theoretical Studies / *Zhengming Zhang, Shuyan He*

REACTOR SAFETY

187 Direct Simulation, Monte Carlo, Multicomponent, Aerosol Dynamics: Coagulation, Deposition, and Source Reinforcement / *Geethpriya Palaniswaamy, Sudarshan K. Loyalka*

THERMAL HYDRAULICS

205 Boron Transport Model with Physical Diffusion for RELAP5 / *Jordi Freixa, Francesc Reventós, Carme Pretel, Lluís Batet*

216 Feasibility Study of a Passive DHR System with Heat Transfer Enhancement Mechanism in a Lead-Cooled Fast Reactor / *Jae-Hyuk Eoh, Seyun Kim, Sang-Ji Kim, Seong-O Kim*

233 The Synergetic Effects of Nuclear-Assisted Gas Turbine Power Cycles / *Yong Hoon Jeong, Mujid S. Kazimi*

RADIOISOTOPES

244 Radiochemical Analysis in Fuel Integrity Evaluation / *Chien C. Lin, J. H. Chao*

MATERIALS FOR NUCLEAR SYSTEMS

251 Molecular Dynamics Simulations of Graphite at High Temperatures / *Brian D. Hehr, Ayman I. Hawari, Victor H. Gillette*