TECHNICAL PAPERS

REACTOR SAFETY

141 Studies on the Comprehensive Methodology for Structuring Accident Mitigation Systems for Next-Generation Pressurized Water Reactors / Yonezo Tsujikura

FUEL CYCLE AND MANAGEMENT

158 A Statistical Approach to Predict the Failure Enthalpy and Reliability of Irradiated PWR Fuel Rods During Reactivity-Initiated Accidents / Cheol Nam, Yong-Hwan Jeong, Youn-Ho Jung

THERMAL HYDRAULICS

169 An Integral Response Scaling Method for Reduced-Height Test Facilities and Its Validation Using RELAP5 for Loss of RHR During Midloop Operation / Hyoung Tae Kim, Hee Cheon No

186 Thermal-Hydraulic Simulation of Localized Flow Characteristics in a Steam Generator / Yuh-Ming Ferng, Yin-Pang Ma, Jer-Cherng Kang

197 A New Method to Determine the Neutron Sensitivity of a Micro Fission Chamber for a Boiling Water Reactor / Atsushi Kimura, Kaoru Fujita, Masaharu Nakazawa, Shinya Fujita, Eiji Seki, Yutaka Tanaka, Shigehiro Kono

204 Safety Evaluation of Primary-Side Bleed-and-Feed Scenarios by an Experimental Loss of Feedwater Event at the IIST Facility / Tay-Jian Liu, Show-Chyuan Chiang

NUCLEAR PLANT OPERATIONS AND CONTROL

221 Incipient Fault Detection and Isolation of Field Devices in Nuclear Power Systems Using Principal Component Analysis / Nitin Kaistha, Belle R. Upadhyaya

RADIOACTIVE WASTE MANAGEMENT AND DISPOSAL

231 Radiolysis of Bicarbonate and Carbonate Aqueous Solutions: Product Analysis and Simulation of Radiolytic Processes / Zhongli Cai, Xifeng Li, Yosuke Katsumura, Osamu Urabe

RADIOISOTOPES

241 Void Fraction Measurement in Subcooled-Boiling Flow Using High-Frame-Rate Neutron Radiography / Masatoshi Kureta, Hajime Akimoto, Takashi Hibiki, Kaichiro Mishima