

### NUCLEAR REACTOR THERMAL HYDRAULICS SPECIAL (NURETH-11)

- 117 Introduction to the Special Issue on the 11th International Topical Meeting on Nuclear Reactor Thermal Hydraulics / *Hervé Lemonnier, Robert Martin, Joy Rempe*

### TECHNICAL PAPERS

- 118 Performance of Planar High-Temperature Electrolysis Stacks for Hydrogen Production from Nuclear Energy / *James E. O'Brien, Carl M. Stoots, J. Stephen Herring, Joseph J. Hartvigsen*
- 132 Computational Fluid Dynamics Model of a Planar Solid-Oxide Electrolysis Cell for Hydrogen Production from Nuclear Energy / *Grant L. Hawkes, James E. O'Brien, Carl M. Stoots, J. Stephen Herring, Mehrdad Shahn*
- 145 Optimization of Advanced High-Temperature Brayton Cycles with Multiple-Reheat Stages / *Haihua Zhao, Per F. Peterson*
- 158 Hot-Channel Stability of Supercritical Water-Cooled Reactors—I: Steady-State and Sliding Pressure Startup / *Jiyun Zhao, Pradip Saha, Mujid S. Kazimi*
- 174 Hot-Channel Stability of Supercritical Water-Cooled Reactors—II: Effect of Water Rod Heating and Comparison with BWR Stability / *Jiyun Zhao, Pradip Saha, Mujid S. Kazimi*
- 191 Development of BWR Regional Stability Experimental Facility SIRIUS-F, Which Simulates Thermal Hydraulics–Neutronics Coupling, and Stability Evaluation of ABWRs / *Masahiro Furuya, Takanori Fukahori, Shinya Mizokami*
- 208 Investigation of a Passive Condenser System of an Advanced Boiling Water Reactor / *Seungmin Oh, Haijing Gao, Shripad T. Revankar*
- 219 Critical Heat Flux in Square- and Nonsquare-Array Rod Bundles for Advanced Light Water Reactors / *Dae-Hyun Hwang, Kyong-Won Seo, Chung-Chan Lee*
- 229 Computational Fluid Dynamics Analysis of Heat Transfer to Heavy Liquid Metals in Bare Rod Bundles / *X. Cheng, N. I. Tak*
- 237 Improved Turbulence Modeling for Performance Evaluation of Novel Fuel Designs / *Emilio Baglietto, Hisashi Ninokata*
- 249 Computational Model for Turbulent Flow Around a Grid Spacer with Mixing Vane / *Tsutomu Ikeno, Takeo Kajishima*
- 261 On the Modeling of Gas Bubble Evolution and Transport Using Coupled Level-Set/CFD Method / *Bartłomiej Z. Wierzbicki, Steven P. Antal, Michael Z. Podowski*

(Continued)

# CONTENTS / MAY 2007—VOL. 158, NO. 2

(Continued)

- 275** Experimental Investigation on Bubble Turbulent Diffusion in a Vertical Large-Diameter Pipe by Wire-Mesh Sensors and Correlation Techniques / *Annalisa Manera, Horst-Michael Prasser, Dirk Lucas*
- 291** Modeling the Evolution of Bubbly Flow Along a Large Vertical Pipe / *Dirk Lucas, Eckhard Krepper, H.-M. Prasser*
- 304** Measurement of the Deposition Rate of Droplets in a Vertical Tube Containing a Flow Obstacle / *Tomio Okawa, Akio Kotani, Naoya Shimada, Isao Kataoka*