

Nuclear Technology

VOLUME 208 · NUMBER 8 · AUGUST 2022

Selected papers from the 2020 International Topical Meeting on Advances in Thermal Hydraulics (ATH'20)

Contents

- iii Foreword
Igor Bolotnov, Sofiane Benhamadouche

TECHNICAL PAPERS

- 1233** CFD Evaluation of Pressure Change Along Coolant Passages in Sodium-Cooled Fast Reactor with Nek5000
Jun Fang, Yiqi Yu, Haomin Yuan, Elia Merzari, Dillon R. Shaver
- 1244** Detailed Analysis of the Effects of Spacer Grid and Mixing Vanes on Turbulence in a PWR Subchannel Under DFFB Conditions Based on DNS Data
Nadish Saini, Igor A. Bolotnov
- 1266** Interface Tracking Investigation of the Sliding Bubbles Effects on Heat Transfer in the Laminar Regime
K. W. Wong, L. Bures, K. Mikityuk
- 1279** Modal Decomposition of the Flow in a Randomly Packed Pebble Bed with Direct Numerical Simulation
Mustafa Alper Yildiz, Elia Merzari, Thien Nguyen, Yassin A. Hassan
- 1290** Acoustic Analysis of the Effects of Vapor-Liquid Interfacial Morphology on Pool-Boiling Heat Transfer
Mustafa H. Almadhi, T. Almudhhi, S. Ebrahim, A. Howell, G. R. Garrett, S. M. Bajorek, F. B. Cheung
- 1301** Assessment of Screen-Covered Grooved Sodium Heat Pipes for Microreactor Applications
Donna Post Guillen, Clayton G. Turner
- 1311** Sensitivity of SC-HTGR Conduction Cooldown to Reactor Cavity Cooling System Failure
Brian Mays, Lewis Lommers, Stacy Yoder, Farshid Shahrokhi
- 1324** ATHLET Simulation of PKL I2.2 IB-LOCA Benchmark Test and Quantitative Assessment
Hong Xu, Aurelian Florin Badea, Xu Cheng
- 1337** Effective Thermal Conductivity of Typical Composite Plate with Inner Heat Source and Temperature Difference
Ziping Liu, Yu Ji, Han Zhang, Jun Sun