

Selected papers from the 12th Japan-U.S. Seminar on Two-Phase Flow Dynamics

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- iii Foreword
Steven Ceccio, Yuichi Murai, Xiaodong Sun, Shuichiro Miwa

REVIEW ARTICLE

- 1867 Advanced Instrumentation and Modeling Framework for Two-Phase Flow
Mamoru Ishii, Yang Zhao, Guanyi Wang, Zhuoran Dang

RESEARCH ARTICLES

- 1886 Newly Developed Method for Liquid Thin Film Thickness Measurement Using Optical Fiber-Based Reflective Probe
Yuki Mizushima
- 1898 Measurement of Local Void Fraction of Air-Water Flow in an 8×8 Rod Bundle Using High-Resolution Gamma-Ray Tomography
Taehwan Ahn, Julio Diaz, Robert Adams, Victor Petrov, Annalisa Manera
- 1914 Liquid Film Thickness for Gas-Liquid Annular Flow Across Grid Spacer with Vanes in Simple 3×3 Rod Bundle Channel
Akimaro Kawahara, Yukihiro Yonemoto, Hiroto Tazoe
- 1929 Application of PIV for Virtual Mass Coefficient Measurement
Alexander Duenas, Qiao Wu, Wade Marcum
- 1939 Experiments on Slug Flow Dynamics in Helically Coiled Tubes
Yuichi Murai, Masaaki Ishikawa
- 1953 Experiment and Modeling of Interfacial Area Concentration of Liquid Film in Upward Annular Two-Phase Flow
Guanyi Wang, Mamoru Ishii
- 1965 Quantitative Validation of Gas-Liquid Flow Regime Transition Using Eulerian-Eulerian CFD Models
J. R. Buchanan Jr., C. E. Clifford, B. M. Waite, T. S. Worosz, M. D. Zimmer

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- 1977** Multiphase Turbulence Modeling Using Sparse Regression and Gene Expression Programming
S. Beetham, J. Capecelatro
- 1987** Interphase and Intergroup Mass Transfer in the Two-Group Two-Fluid Model in Flows with Phase Change
Joseph L. Bottini, Caleb S. Brooks
- 2002** Uncertainty Quantification for Multiphase Computational Fluid Dynamics Closure Relations with a Physics-Informed Bayesian Approach
Yang Liu, Nam Dinh, Xiaodong Sun, Rui Hu
- 2016** RANS-Based CFD Simulation of Jet-Induced Mixing and Jet Impingement on Large Bubble in Microgravity
Eymon Lan, Shanbin Shi
- 2030** Radioactive Aerosol Control and Decontamination in the Decommissioning of the Fukushima Daiichi Nuclear Power Station
Avadhesh Kumar Sharma, Hui Liang, Ruicong Xu, Erdal Ozdemir, Shuichiro Miwa, Ryohei Terabayashi, Shunichi Suzuki, Marco Pellegrini, Shuichi Hasegawa, Nejdet Erkan