

Preface

Boiling heat transfer is a favored mode of convective energy transport in numerous industrial applications due to the high heat fluxes available with relatively low wall temperatures. Boiling phenomena are extremely complex and require simultaneous understanding of the associated thermodynamics, fluid dynamics, thermal transport, and surface physics and chemistry in order to develop reasonably accurate analytical and computational models. The present issue contains selected papers from the 5th ECI International Conference on Boiling Heat Transfer (ICBHT) held in Montego Bay, Jamaica, 4–8 May 2003. Selected papers were chosen for their high quality, appeal to the subscriber base of the *International Journal of Heat and Fluid Flow* (IJHFF), and representation of topics covered. All papers have undergone rigorous peer review following standard IJHFF procedures, after which authors have undertaken final editing of their papers.

The ICBHT was convened in the spirit of extrapolating the knowledge and experience gained over the past seventy years to challenging length scales, geometries, and operating regimes. The Conference has a history of attracting state-of-the-art research in the science and technology of pool and flow boiling from around the globe. Conference participants convened upon the island of Jamaica from four different continents: Asia, Europe, North America, and South America. Topics which are covered in this issue include: boiling heat and mass transfer in microscale, two-phase flow and heat transfer predictions, experimental methods in boiling, boiling fundamentals, heat transfer and bubble formation, and high heat flux promotion.

The Conference organizing committee wishes to thank all participants of the 5th ICBHT for making it a very successful platform for exchanging innovative ideas and progressing the state-of-the-art in boiling heat transfer.

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