Preface

The present volume contains selected papers of the 33rd International Conference on Thermal Conductivity (ITCC) and 21st International Thermal Expansion Symposium (ITES), which were held on May 15–18, 2017, at the Utah State University in Logan, Utah, USA.

The primary goal of the combined conference is to bring together researchers in academia, research institutions, government labs, and industry to share knowledge in various areas covered by ITCC-ITES. The conference provides a forum for the free exchange of ideas, advancement of the science, and discussion of recent developments in a wide variety of topics in thermophysics, including steady-state and transient measurement techniques, material properties, material applications, modeling and simulation, and general aspects of thermal properties.

The International Thermal Conductivity Conference has a long history of successful conference series in more than fifty years. Since 1997, it is held concurrently with the International Thermal Expansion Symposium every two years. This ITCC-ITES conference was managed by Utah State University Eccles Conference Center, which was competitively selected by the board of governors of ITCC-ITES to host the meeting.

This conference had 90 attendees from 11 countries. They presented a total of 68 presentations, from which 23 were reviewed and included in this volume.

During the conference, the Board of Governors of ITCC held a meeting to decide the site of the next conference. Dr. Daniela S. Gaal was elected to be the Chair of the Board. The members of the Board are as follows:

Tetsue Baba
Daniel Flynn
Ulf Hammerschmidt
Wallace Porter
Hsin Wang
Heng Ban
Peter Gaal
Laszio Kiss

Ron Steuterman
Ernest Wolff
Ralph Dinwiddie
Daniela Gaal
John Koenig
Lynn St-George
David Yarbrough
Timothy Fisher
Ronald Graves
David McElroy
Ron Tye
Robert Zarr

The C.F. Lucks Award was initiated in 1987 to honor Charles F. Lucks for his many contributions to this field, including being Chairman of the First Thermal Conductivity Conference in 1961 at Battelle Memorial Institute, Columbus, Ohio. The award is a recognition of a significant paper, thesis, or other contribution to the overall subject, to a young or otherwise new worker in the field of thermal conductivity and its associated properties. The Board selected Dr. Troy Munro, an Assistant Professor in Mechanical Engineering at Brigham Young University as the winner of the C.J. Luck's Award.

John Koenig, Timothy Fisher, and Jiyu Wu were elected to be Fellow of ITCC. John Koenig and Andrzej Brzezinski were selected as winners of the prestigious Thermal Conductivity Award to recognize their long-time commitment and outstanding contributions to the advancement of thermophysical property research and development.

The success of this conference is the result of the efforts of many people and organizations. I would like thank the Utah State University for the strong support for the conference. I want to express my sincere thanks to Mara Christensen, Angela Griffeth and Robbie Gerber of the Eccles Conference Center. I am very grateful to the members of ITCC Board of Governors, especially, John Koenig, for the guidance and assistance throughout the process. I would also like to express my appreciation to my graduate students at the Utah State University, who contributed significantly to conference organization and logistics before and during the conference.

I am looking forward to the 34th International Thermal Conductivity Conference and 22nd International Thermal Expansion Symposium that will be held on June 3–6, 2019 in New Castle, Delaware, hosted by TA Instruments. We hope that it will be interesting and enjoyable as all of its predecessors.

Conference Chair

Heng Ban, R.K. Mellon Professor in Energy
Dept. of Mechanical Engineering & Materials Science
University of Pittsburgh