

## Preface

Molecular and microscale thermal science and engineering is an emerging field in the heat transfer community. The last few years have witnessed a steady increase in the number of papers published and in the number of conference sessions organized on this topic. The excitement in this field of microscale or nanoscale phenomena is not only in thermal sciences but in science and engineering in general. Therefore it was felt that it is timely to organize a special forum on this topic. Due to the rapidly increasing activity in this area in both Japan and the USA, a joint seminar was planned with the following goals:

- (i) to assess the accomplishments and to determine the future needs;
- (ii) to address some of the open scientific and engineering questions;
- (iii) to increase the awareness of the researchers with regards to the industrial demands and to the research conducted in other disciplines;
- (iv) to provide a forum to present new results; and
- (v) to increase interdisciplinary and international collaboration.

The seminar, held in Kanazawa, Japan on July 11-14, 1993, was supported by the Japan Society for the Promotion of Science (JSPS) from the Japanese side and by the National Science Foundation (NSF) from the US side. This book contains the papers that were presented at this seminar. A report contains the papers that were presented at this seminar. A report containing a critical assessment of the seminar will also be published soon in the Annual Review of Heat Transfer (Volume 7). Hopefully, these papers and the critical report will raise some important issues and questions that need to be addressed in the future.

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