

Preface

The Thirteenth Symposium on Thermophysical Properties was held at the University of Colorado, Boulder, Colorado, U.S.A. from June 22–27, 1997. The Symposium was organized by the Standing Committee on Thermophysical Properties of the Heat Transfer Division of the American Society of Mechanical Engineers, and was sponsored by the Physical and Chemical Properties Division of the National Institute of Standards and Technology.

The Symposium was the thirteenth in the well established series of conferences held roughly every three years since 1959. It brought together leading international experts presenting papers on state-of-the-art research associated with the theoretical, experimental, and applied aspects of the thermophysical properties of gases, liquids, and solids.

Studies of the thermodynamic and transport properties of fluids and solids were broadly represented. In areas of great scientific and technological interest, experts were asked to organize special sessions, to propose key invited speakers, to encourage presentation of contributed papers, and to organize the review process of contributors in their respective areas. Special sessions for the Thirteenth Symposium covered the following topics: acoustic, optical, photothermal, and subsecond techniques of measuring thermophysical properties; materials of strong technological interest, namely molten materials, natural gas, thin films, refrigerants, polymer solutions, and supercritical fluids; properties for chemical and metallurgical process design; fundamental topics such as molecular simulation of fluid behavior, critical behavior, properties in low gravity, shear effects on property measurement, structure of fluids, and wetting and interfaces; and property data and correlations, including demonstrations of computerized databases. The Thirteenth Symposium featured the presentation of the Yeram S. Touloukian Award by the ASME Heat Transfer Division to Ared Cezairliyan and William A. Wakeham.

The Thirteenth Symposium had a record attendance of almost 600 participants from more than 35 countries. More than 500 papers were presented; over half of them were from countries outside the United States, which reflects the truly international character of the symposium.

The Proceedings of the Symposium are being published as special issues of this journal and *Fluid Phase Equilibria*. This issue is the first in the series for the *International Journal of Thermophysics*; other papers presented at the Symposium will appear in subsequent issues. Selection of papers for publication is based on established journal policies of favorable independent reviews by referees.

Approximately 340 manuscripts were submitted for publication in the Proceedings. A preprint volume of all manuscripts was prepared on CD-ROM and distributed to participants at the conference. Information on the Thirteenth Symposium has been available on the Symposium Website at <http://www.boulder.nist.gov/div838/symp13/>.

It is a pleasure to acknowledge the expertise and dedication of the many individuals who contributed to the successful organization of the Symposium and to the preparation of the Proceedings. Among those are the authors and invited speakers, the chairs and organizers of the special and regular sessions (special session organizers listed on previous page), the referees of the papers, and the members of the Standing Committee on Thermophysical Properties of the ASME Heat Transfer Division. We acknowledge the support of the Physical and Chemical Properties Division of the National Institute of Standards and Technology. Special thanks are due Becky Stevenson, the Symposium Secretary, and Gary Hardin, the Symposium Webmaster and Editor of CD-ROM volume, for their competence, dedication, and cooperation that played major roles in the organization of the conference.

We were extremely shocked and saddened by the sudden death of Ared Cezairliyan during the preparation of the Symposium Proceedings. Ared, who was a recipient of the Yeram S. Touloukian award at the Thirteenth Symposium, gave decades of dedicated service to the Symposium on Thermophysical Properties. He served as organizer/co-organizer of the symposium and as editor/co-editor of the symposium proceedings. It is with utmost respect and thanks that the Proceedings of the Thirteenth Symposium on Thermophysical Properties are dedicated to the memory of a friend and colleague, Ared Cezairliyan.

W. M. Haynes

R. A. Overfelt

*Chairs of the 13th Symposium on
Thermophysical Properties*



Ared Cezairliyan (1934–1997)