

Preface

The Ninth Symposium on Thermophysical Properties was held in Boulder, Colorado, on June 24–27, 1985. It was sponsored by the Standing Committee on Thermophysical Properties (K-7) of the Heat Transfer Division of the American Society of Mechanical Engineers and the Center for Chemical Engineering of the U.S. National Bureau of Standards (NBS). We plan to publish the papers presented at the conference in this journal, and this issue presents the first in the series: other papers will appear in subsequent issues.

We have the pleasure of starting the series with the introductory remarks of Dr. Gratch, one of the founder members of the committee and the symposia. He outlines the history and objectives of both. Here we need only to reemphasize the goal of the ninth conference, namely, to bring together scientists and engineers who are interested in the behavior of solids and fluids; how their thermophysical properties reflect the behavior; how the behavior can be explained on theoretical grounds and how the properties can be correlated and, especially, predicted: that is, applied statistical mechanics and thermodynamics in general. Also, we wanted to discuss how properties are used and handled in industry. The areas for discussion were, therefore, consistent with the goal and included, for example, thermodynamic and transport properties of solids and fluids, experimental techniques, data evaluation and correlation, data bases, and similar topics.

The K-7 Committee was encouraged and flattered by the response. Over 170 papers were presented by speakers representing more than 20 nations. This international flavor was especially gratifying. The technical content was uniformly high and varied, and we think the papers reflected the modern view that thermophysical properties are an integral part of science and engineering.

However significant the papers are in their own right, they only provide a basis for discussion. We feel proud that the Ninth Symposium encouraged the making of friends and allowed old friendships to be renewed. It engendered dialogue and the understanding of different viewpoints. All this was helped immensely by the pleasant setting of the Univer-

sity of Colorado and the courtesy and efficiency of the university's conference staff. We are most grateful to these people, with special thanks due to Ms. Gwen Ritter, who was responsible for the logistics. We are very grateful to Ms. Karen Bowie of the National Bureau of Standards, who was indispensable to the chairman. She handled her prodigious clerical load superbly.

Many people contributed in various ways to the technical side of the conference: the advice and contribution of Professor J. V. Sengers, Chairman of the Eighth Symposium, were of paramount importance; the chairpersons carried out their tasks constructively and efficiently; and the staff of the Fluid Properties' Group of the Chemical Engineering Science Division (NBS, Boulder) were particularly helpful in suggesting topics and speakers.

Finally, the symposium would not have been possible without the support of the Center for Chemical Engineering (NBS), Jesse Hord, Director. We are most grateful to Mr. Hord, and to Dr. J. Lyons, Director of the National Engineering Laboratory of the NBS, and hope that the success of the conference has repayed their confidence in us.

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Chairman

Thermophysical Properties Committee

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