

Introductory Statement

About three years ago, CINDAS (Center for Information and Numerical Data Analysis and Synthesis) at Purdue University conducted an extensive international survey regarding the need for a new journal on thermophysics. Responses from nearly one thousand individuals reaffirmed the general consensus of the need for a high quality journal having a policy of broad coverage in all major scientific and technological areas of thermophysics. Based on the overwhelmingly positive attitude and the encouragement of the thermophysics community, it has been decided to establish the *International Journal of Thermophysics*.

The *International Journal of Thermophysics* will be a major focal point for communication within the scientific and technical communities, serving both the generators and users of thermophysical properties data. Its interdisciplinary approach will reflect the overlapping interests of those working in various fields of science and engineering related to thermophysical properties and thermophysics and its applications.

The journal will serve as an international medium for the rapid publication of refereed papers on experimental and theoretical studies of thermal and related properties of matter in the solid, liquid, and gaseous states. Studies in all ranges of temperature, pressure, wavelength, and other relevant experimental variables will be included.

Some of the specific topics that the journal will consider are:

- Thermodynamic properties; including heat capacity, enthalpy, vapor pressure, thermal expansion, surface tension, and other properties related to phase changes, PVT, and calorimetric studies
- Transport properties; including thermal and electrical conductivity, thermal diffusivity, viscosity, and related properties
- Thermal radiative properties; including emittance, absorptance, reflectance, and optical constants
- New developments in experimental techniques and instrumentation relevant to thermophysical measurements
- Reviews of current topics in thermophysics

- Reports on reference materials and critical evaluation and standardization of techniques and procedures for thermophysical measurements
- Methods of collection, critical evaluation, correlation, and dissemination of thermophysical properties data
- Selected technological applications of thermophysics

In order to assure rapid publication of papers, distribution of topics will somewhat vary in different issues.

The journal will publish original research articles, authoritative review papers, articles on relevant applications, and brief communications on research and applications. In the near future, a section of general interest will be offered, which will be comprised of announcements of meetings, conferences, publications, and information on activities of major international laboratories and data centers in the thermophysics field. Initially, the journal will be issued on a quarterly basis; however, we anticipate expansion to bimonthly publication in the not too distant future.

On the occasion of the publication of the first issue of the *International Journal of Thermophysics*, it is with great pleasure that I acknowledge the unique and indispensable role that Dr. Y. S. Touloukian, Director of CINDAS, played in establishing the journal. Dr. Touloukian suggested and actively pursued the idea of a new journal to be devoted to thermophysical properties, did much of the essential preparatory work, and acted as a catalyst in the process of establishing the journal from its early embryonic stage to its birth with this issue. I am certain that he will continue to provide us with valuable suggestions and help, especially during the journal's formative period.

It is with great pride that I present to you the Editorial Board, whose distinguished membership (listed on the inside of the front cover) reflects the truly international character of the journal and its dedication to excellence. I express my appreciation of the cooperation and contributions by the members of the board as well as by the anonymous reviewers, whose efforts are and will be of utmost importance in the establishment and maintenance of high standards for the journal.

It is also very appropriate to mention the crucial role of the staff of Plenum Publishing Corporation in the success of the journal by providing great care in the process of transforming the typed manuscripts into high-quality printed papers and by assuring rapid publication and dissemination of the journal.

Every published issue of the journal will be an added testimony to the realization of the importance of thermophysics in every major scientific and technological endeavor. The accomplishment of the above will undoubtedly depend on the serious efforts of the entire international thermophysics

community, and especially, on the dedication and determination of the authors in submitting quality manuscripts.

I look forward to your sharing with me the great optimism about the future of the *International Journal of Thermophysics* and to your help in assuring its success.

Ared Cezairliyan
Editor-in-Chief