THERMOInternational 2006 Conference held at NIST in Boulder, Colorado

A major international forum of about 700 leading technical researchers in thermodynamics and related fields, THERMOInternational 2006, was held at the University of Colorado in Boulder from July 31 to August 4. It was organized and sponsored jointly by NIST, the American Institute of Chemical Engineers (AIChE), the American Society of Mechanical Engineers (ASME), the International Union of Pure and Applied Chemistry (IUPAC), and the International Association of Chemical Thermodynamics.

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THERMOInternational 2006 comprised three historically distinct conferences: the 16th Symposium on Thermophysical Properties, the 19th International Conference on Chemical Thermodynamics (ICCT), and the 61st Calorimetry Conference. Because each of the conferences was slated for North America this year, they were joined to create the unique event. There were approximately 1000 presentations on the program, representing 750 speakers from 54 countries and 2000 authors from 62 countries.

Much of the research presented at the conference was related to NIST's mission in measurement science, standards, and technology, but the participation was global, with about 75% of the attendees from outside the U.S.

The featured work presented at the conference impacts some of the larger themes and policy issues of our time: energy efficiency/self-sufficiency, a hydrogen-based economy and alternative fuels, global warming, ozone depletion, informatics, simulation, and biophysics.

CSTL staff played prominent roles in the conference, giving many presentations as well as being the primary organizers. Willie May, Director of CSTL, was among those giving opening remarks. William (Mickey) Haynes (Scientist Emeritus in CSTL) headed the organizing committee, and Michael Frenkel (Group Leader in Physical and Chemical Properties Division) and Dan Friend (Acting Chief of the Physical and Chemical Properties Division) served as vice presidents and chaired the distinct components.

The Touloukian Award, a major honor within ASME for outstanding achievement in thermophysical properties research, was presented to NIST Fellow Emeritus Anneke Sengers.

The Touloukian Award was awarded "for advancing the theoretical understanding of thermodynamics of pure fluids and mixtures near critical points, and for applying that understanding to improve practical predictions and correlations of the thermodynamic properties for industrial processes and electrical power cycles." Before the award was presented, Nobel Laureate Carl Wieman gave the Touloukian Memorial Lecture, "A Scientific Approach to Teaching Science." The Rossini Award of the Calorimetry Conference was presented to Alex Navrotsky from U. C. Davis, and the Huffman Award, of the ICCT, went to Earl Woolley of BYU.