

PROPOSAL FOR A JOINT ASME-AIChE COMMITTEE ON THERMOPHYSICAL PROPERTIES

June 2002

Background

The ASME Heat Transfer Division's K-7 Technical Committee on Thermophysical Properties is one of the oldest in the division. It was established in the early 1940's with the "objective of encouraging original research on thermal properties," according to Professor S. Peter Kezios in his presentation on the history of the Symposium on Thermophysical Properties at the 13th Symposium in June, 1997. Early in its existence, the committee's focus expanded to thermodynamic and transport properties for virtually all working fluids (e.g., water and steam, environmentally safe refrigerants, thin films, cryogenics, biological fluids, and nanofluids) as well as radiative and thermophysical properties of solids. This broad range of properties and materials has required a strong interdisciplinary committee drawn from a variety of scientific communities. Currently, in addition to traditional mechanical engineering, many of the committee members have professional backgrounds in physics, chemistry, and chemical engineering.

The American Institute of Chemical Engineers (AIChE) has a strong parallel interest in the topics considered by the K-7 committee. This interest is particularly apparent in the groups within the AIChE that are interested in chemical process design and simulation, for example. Indeed, several members of the current K-7 committee are AIChE members. Contacts with AIChE have indicated support for the formation of a joint technical committee on thermophysical properties to better coordinate the interdisciplinary activities of the committee. The current members of the ASME K-7 committee strongly support this change, believing that it will strengthen the committee's efforts.

Mission Statement

The mission of the Joint ASME-AIChE Committee on Thermophysical Properties is to coordinate the exchange and dissemination of the latest information concerning thermophysical properties of substances to the scientific and engineering communities. This is done primarily through dissemination of information at the triennial Symposium on Thermophysical Properties, the premier international meeting concerning thermophysical properties, which is organized by this committee. The committee also organizes sessions, as interest dictates, at appropriate ASME and AIChE sponsored meetings.

Committee Structure

The joint committee will function as an "umbrella" committee for the joint efforts of the ASME and AIChE, with the current ASME K-7 committee designation remaining intact

for interactions with ASME. Details of meeting times and places and eligibility for committee offices, including but not limited to the chair, vice chair, secretary, and webmaster will be determined by the joint committee members and incorporated in the new committee's bylaws. The first meeting of the joint committee will be held at the close of the 15th Symposium on Thermophysical Properties in Boulder, Colorado in June 2003.

Because the Yeram S. Touloukian Award, which is presented at each symposium, is an ASME National Award, the Touloukian Award subcommittee will be composed of ASME members.

Approval

Approval is sought from both ASME and AIChE for the formation of a Joint ASME-AIChE Committee on Thermophysical Properties, which will then develop the bylaws for the new committee. Mutual agreement of ASME and AIChE is required for the formation of the joint committee, which will include the current K-7 committee and additional interested AIChE members. Additional members will be added using procedures stated in the bylaws.

Schedule

The following schedule is suggested:

Item	Date
Request to establish an ad-hoc joint ASME-AIChE committee	November 2001 (completed)
Draft proposal to ad-hoc committee	April 2002 (completed)
Approval of proposal by ad-hoc committee	June 2002 (completed)
Final proposal to ASME and AIChE (including draft bylaws*)	September 2002
Approval of proposal by ASME and AIChE	November 2002
First joint committee meeting at the close of the 15 th Symposium	June 2003

*Current ASME Heat Transfer Division Bylaws can be found at:

<http://www.asme.org/divisions/htd/divisionadmin/htdbylaws.pdf>

Appendix
Joint ASME-AIChE Committee on Thermophysical Properties

Basu, Rajat S., Honeywell International, Buffalo Research Laboratory, 20 Peabody Street, Buffalo, NY, 14210, Phone: (716) 827-6231, FAX: (716) 827-6373, email: rajat.basu@honeywell.com.

Dandy, David S.*, Chemical Engineering Dept., 209 Engineering So. Glover, Colorado State University, Fort Collins, CO, 80523, Phone: (970) 491-7437, email: dandy@engr.colostate.edu

Ely, James F.*, Chem Engineering Dept., Colorado School of Mines, Golden, CO, 80401, Phone: (303) 273-3885, FAX: (303) 273-3730, email: jely@mines.edu.

Friend, Daniel G.*, NIST - Physical & Chemical Properties Division, 838.08, 325 Broadway, Boulder, CO, 80305-3328, Phone: (303) 497-5424, FAX: (303) 497-5044, email: daniel.friend@boulder.nist.gov.

Haynes, W. Mickey, NIST - Physical & Chemical Properties Division, 838, 325 Broadway, Boulder, CO, 80305-3328, Phone: (303) 497-3247, FAX: (303) 497-5044, email: william.haynes@nist.gov.

Holste, James C.*, Dept of Chemical Engr - Texas A&M University, 3122 TAMU, College Station, TX, 77843-3122, Phone: (979) 845-3384, FAX: (979) 845-6446, email: j-holste@tamu.edu.

Jacobsen, Richard T, Idaho National Engineering & Environmental Laboratory, P.O. Box 1625, Idaho Falls, ID, 83415-3790, Phone: (208) 526-4435, FAX: (208) 526-4236, email: jacor@inel.gov.

Kezios, S. Peter, George W. Woodruff School of Mechanical Engineering, Georgia Institute of Technology, Atlanta, GA, 30332-0405, Phone: (404) 894-3200, FAX: (404) 894-8336.

Kincaid, John M., Department of Mechanical Engineering, State University of New York at Stony Brook, Stony Brook, NY, 11794-2300, Phone: (516) 632-8305, FAX: (516) 632-8544, email: John.Kincaid@sunysb.edu.

Mandelis, Andreas, Univ of Toronto - Dept of Mechanical & Industrial Engr, 5 King's College Road, Toronto, Ontario, Canada, M5S 3GB, Phone: (416) 978-3040, FAX: (416) 978-7753, email: mandelis@mie.utoronto.ca.

Mathias, Paul*, AspenTech Technology, Ten Canal Park, Cambridge, MA, 02141-2201, Phone: (617) 949-1727, email: paul.mathias@aspentech.com.

Olson, Jim D., Dow Chemical, 3200 Kanawha Turnpike, Building 740-3107, P.O. Box 8361, Charleston, WV, 25303, Phone: (304) 747-5789, FAX: (304) 747-4270, email: olsonjd@dow.com.

Overfelt, R. (Tony) A., Auburn University - Dept of Mechanical Engineering, 201 Ross Hall, Auburn, AL, 36849, Phone: (334) 844-5940, FAX: (334) 844-3400, email: overfra@auburn.edu.

Penoncello, Steven G., College of Engineering, University of Idaho, Moscow, ID, 83844-1011, Phone: (208) 885-6479, FAX: (208) 885-6645, email: stevep@uidaho.edu.

Sengers, Jan V.*, Institute for Physical Science and Technology, Room 2113E, University of Maryland, College Park, MD, 20742, Phone: (301) 405-4805, FAX: (301) 314-9404, email: sengers@ipst.umd.edu.

Singh, Rajiv R., Honeywell International, 20 Peabody St., Buffalo, NY 14210, Phone: (716) 827-6375, FAX: (716) 827-6275, email: rajiv.singh@honeywell.com.

Thomson, George*, Design Institute for Physical Properties, AIChE, 2308 Brother Luke Place, Santa Fe, NM 87505-5799, Phone: (505) 986-1586, FAX: (505) 986-1687 email: ghthomson@cnsf.com

Wright, Neil T., UMBC - Department of Mechanical Engineering, 2555 Engineering Building, Michigan State University, East Lansing, MI, 48824-1226, Phone: (517) 432-4917, FAX: (517) 353-1750, email: wright01@egr.msu.edu

Zhang, Zhuomin M., Georgia Institute of Technology, Woodruff School of Mechanical Engineering, 801 Ferst Drive, N.W., Atlanta, GA 30332-0405, Phone: (404) 894-3759, FAX: (404) 894-8496, email: zzhang@sununo.me.gatech.edu

*Current AIChE members