

Program of the 5th Midwest Thermodynamics Symposium

Hartland, Michigan

May 17–19, 1992

Following is a list of talks presented at the 5th Midwest Thermodynamics Symposium. This annual meeting brings together people from physics and engineering academic disciplines as well as industrial researchers who have an interest in thermodynamics and statistical mechanics. Note that all collaborators are not necessarily listed. Anyone who is interested in communicating with a speaker and requires a more complete address may obtain it by writing to me.

The next meeting will be held in Houghton, Michigan, May 23–25, 1993. The meeting chairman will be Michael Wertheim, Michigan Technological University, Houghton MI 49931-1295, (906) 487-2088. If you are interested in further information about this meeting, please contact him.

Robert M. Ziff

Chairman, 1992 Meeting
Department of Chemical Engineering
University of Michigan
Ann Arbor, Michigan 48109-2136

Fluids of hard convex molecules

Michael Wertheim, Michigan Technological University

Non-equilibrium molecular dynamics simulation of transport properties and non-Newtonian rheology

Peter T. Cummings, University of Virginia

Molecular thermodynamics of fluids in porous media and partially quenched glasses

William Madden, Wayne State University

Multipolar electrolyte solution models

John Eggebrecht, Gunther H. Peters, and Pelin Ozler, Argonne National Laboratory

Kinetics of swelling of a cross-linked elastomer or gel

Giuseppe Rossi, Ford Motor Company

Influence of monomer structure and compressibility on neutron scattering and thermodynamic properties of polymer fluids: Application to binary blend and diblock copolymer systems

Jacek B. Dudowicz and Karl F. Freed, University of Chicago

Monte-Carlo calculations of wall-to-random-bed view factors: Hard spheres and fibers

J. W. C. Tseng, Y. Xia, and William Strieder, University of Notre Dame

Use of velocity of sound in predicting *PVT* relations of dense fluids

Mohammed R. Riazi and G. Ali Mansoori, University of Illinois, Chicago

Thermodynamic analysis of mixtures which contain associating species

Scott W. Campbell, University of South Florida

Attractive force effects in chain molecular fluid mixtures

J. Richard Elliott Jr. and V. J. Vasudevan, University of Akron

Experimental and equation-of-state results for associating mixtures

S. J. Suresh and J. Richard Elliott, Jr., University of Akron

VLE calculations of associating Lennard-Jones fluids via the Gibbs ensemble

Tsangaris Dimitrios, University of Wisconsin

Spectroscopic study of local compositions in supercritical fluid mixtures

J. Bryan Ellington and Joan F. Brennecke, University of Notre Dame

Supercritical water oxidation—Pathways and kinetics

Phillip Savage, University of Michigan

Comparison of lattice fluid models in correlating gas-polymer solubility data

Ashok Garg, Seechol Kim, and Esin Gulari, Wayne State University

Thermochemical predictions in the industrial environment

J. R. Downey, D. J. Frurip, *Marabeth S. LaBarge*, S. K. Gupta, A. N. Syverud, and R. J. Zondlak, Dow Chemical Co.

Thermodynamic model for mechanical tension control of neurite growth and degrowth

Robert E. Buxbaum and Stephen R. Heidemann, Michigan State University

Coalescence and percolation during non-equilibrium growth

Phillip Duxbury, Michigan State University

Fluctuations in fragmentation processes

Tim Newman, University of Illinois

Fragmentation in spin glasses and phonon cascades

Sergei Esipov, University of Illinois

A thermodynamic-like critical point in a kinetic model of catalysis

Ben Brosilow and *Robert Ziff*, University of Michigan

Towards a self-consistent kinetic theory for liquids

John Karkheck, GMI Institute

Adsorption model for large pressure ranges

Carl T. Lira, Michigan State University

Universality of critical states theory for classical equations-of-state

Akanni S. Lawal, BP Exploration, Alaska