Program of the Eighth West Coast Statistical Mechanics Conference

Department of Chemistry University of California Berkeley, California

June 22, 1982

Acknowledgement is made to the Department of Chemistry, University of California at Berkeley for partial support of the conference.

"Molecular Dynamics Simulations of Flouro Berylate Glasses," Steve Brawer (Lawrence Livermore National Laboratory).

"Nonexponential Relaxation Functions in Spin Resonance and Dielectric Relaxation of Viscous Liquids," *Richard A. MacPhail and Daniel Kivelson* (UCLA).

"Application of Redfield Theory of Dynamical Effects in Infrared Spectroscopy: The Motions of Water in Crystalline Hydrates," *Robert M. Corn and H. L. Strauss* (University of California at Berkeley).

"Dislocation Motion and Plastic Flow via Nonequilibrium Equations of Motion," W. G. Hoover, A. J. C. Ladd, B. Moran, B. Failor, and A. Combs (University of California at Davis and Lawrence Livermore National Laboratory).

"Wave Structure of Dense Fluid Detonation," *Mohamed Abdelazeem* (University of California at Davis).

"Effective Dielectric Constant of a Statistically Homogeneous Random Medium," John Ramshaw (Los Alamos National Laboratory).

"Real Space Renormalization Group for Polymers and Percolation," P. J. Reynolds (Lawrence Berkeley Laboratory).

"Critical Phenomena in 'Living' Polymers," Stephen Kennedy (University of California at San Diego).

"Fragmentation: A New Class of Percolation Phenomena," Alan Kerstein (Sandia Livermore Laboratory).

879

^{0022-4715/82/1200-0879\$03.00/0 © 1982} Plenum Publishing Corporation

"Correlated Walk Model for Thermally Stimulated Currents in Alpha-Keratin," *E. Blaisten-Barojas* (Instituto de Fisica, Universidad Autonoma Metropolitana-Iztalpalapa).

"Critical Exponents of BCC Ising Model via Inhomogeneous Differential Approximants," John J. Rehr (University of Washington) and B. G. Nickel (University of Guelph).

"Spinodal Decomposition in One-Component Fluids," Stephan Koch, Farid Abraham, and R. Desai (IBM, San Jose).

"Recurrence Phenomena in Quantum Dynamics," T. Hogg and B. A. Huberman (Xerox, Palo Alto).

"Computational Methods for Finite Temperature Quantum Many-Body Problems," E. L. Pollock (Lawrence Livermore National Laboratory).

"Ground State of Hydrogen at High Pressures," *David Ceperley* (Lawrence Livermore National Laboratory).

"Phase Diagram of Helium," David A. Young (Lawrence Livermore National Laboratory).

"Simple Mixing Rule for Exp-6 Mixtures and Its Application to H_2 -He Systems," *Francis H. Ree* (Lawrence Livermore National Laboratory).

"On the Constant Pressure Specific Heat of a Simple Fluid," John Stephenson (University of Alberta).

"N-Dependence in the Classical One-Component Plasma Monte Carlo Calculation," W. Slattery, G. Doolen, and H. E. DeWitt (Los Alamos National Laboratory).

"Stokes Law for Small Spheres," W. E. Alley (Lawrence Livermore National Laboratory).

"Generalization of the Onsager Reciprocity Relations," James P. Hurley (University of California at Davis).

"Surface Excess Thermodynamic Functions from Modified Moments," John C. Wheeler (University of California at San Diego).

"HNC Approximation for Double Layers Containing Asymmetric Electrolytes," D. Henderson and M. Lozada (IBM, San Jose).

"Calculations on the Double Layer," Craig McClanahan and D. A. McQuarrie (University of California at Davis).

"Surface Structure of Dilute Electrolyte Solutions," Albert L. Nichols III and Lawrence R. Pratt (University of California at Berkeley).

"The Poisson-Boltzmann Equation Predicts 'Condensation' of Counter-ions on a Polyelectrolyte," B. H. Zimm and M. Le Bret (University of California at San Diego).

"Dipolar Interactions for Liquid Crystal Cores with Semi-Flexible Tails," F. Dowell (Los Alamos National Laboratory).

Program

"Infrared Studies of Phase Transitions in Solid Alkanes," Mark Maroncelli, H. L. Strauss, and R. G. Snyder (University of California at Berkeley).

"Our Heuristic Theory of Equilibrium Hard Core Objects Looks Simple and Accurate; How 'Rigorous' or 'Empirical' is it?" Frank C. Andrews and H. Michael Ellerby (University of California at Santa Cruz).