Theory for Experimentalists

A Symposium in Celebrating Robert J. Silbey's 65th Birthday

June 24-25, 2005

Stata Building #32, MIT, Room 32 - 141

Friday, June 24

8:30 am Opening remarks

8:45 am Session Chair, Matt Jacobson, University of California, San Francisco

Frank L.H. Brown, University of California, Santa Barbara
Simple Models for Biomembrane Structure and Dynamics

Shalom Rackovsky, Mt. Sinai School of Medicine
The Encoding of Architecture in Protein Sequences

Sophia Yaliraki, Imperial College, London
Coarse-grainiing Self-assembling Systems with Sum of Squares

11:00 am Session Chair, Richard Friesner, Columbia University

Kenneth D. Jordon, University of Pittsburgh
Protonated Water Clusters as a Vehilce for Probing the Zundel V. Eigen Nature of the Aqueous

R.R. Schrock, MIT
Catalytic Reduction of Dinitrogen to Ammonia at a Single Molybdenum Center

1:15-3:00 pm Session Chair, Stuart A. Rice, University of Chicago

Jean-luc Bredas, Georgia Institute od Technology
Charge Transport in Organic Semiconductors

Jerome Cormil, University of Mons-Hainaut
Charge generation and Recombination Dynamics in Organic Solar Cells: The Role of Packing and Dimensionality

David Yaron, Carnegie Mellon University
Modeling the Effects of Disorder on the Photophysics of Organic Materials

3:30-4:40 pm Session Chair, Robert W, Field, MIT

Silvia Volker, Huygens Laboratory, Leiden University
BOBing on a Theoretical Life-bouy

Joseph Zyss, Ecole Normale Superieure de Cachan
Review and Current Advances of a Decade Long Story of Tracking and Motioning Molecules by Light from a Material to a Single Molecile Field

Saturday, June 25

8:45-10:30 am Session Chair, Philip Pechukas, Columbia University

Jeffrey A. Cina, University of Oregon
Vibrational Wavepackets in Electronic Energy Transfer and Molecular State Reconstruction

David R. Yarkony, John Hopkins University
Escape from the Double Cone Described using Gateway Coordinates

Robert A. (Bob) Harris, University of California, Berkeley
Atomic and Molecular Solutions to the "Ozma Problem"

11:00-12:10 pm Session Chair, David Reichman, Columbia University

Eli Barkai, University of Notre Dame
Ergodicity Breaking in Single Molecule Spectroscopy

J. Klafter, University of Tel Aviv
From Diffusion to Anomalous Diffusion: A Century after Einstein's Brownian Motion

1:15-3:00 pm Session Chair, Bruce J. Berne, Columbia University

Andreas Heuer, Universistat Munster, Institut fur Physikcalische Chemie
The Energy Landscape of Disordered Systems: Insight from Computer Simulations

Brett Jackson, University of Massachusetts
Eley-Rodeal and Hot-Atom Reactions of Atomic Hydrogen with Surface Absorbed Specs

Bob Munn, University of Manchester
Simulation of Ion Transport through Poly(ethylene oxide) Loaded with Lithium Perchlorate

3:30-5:30 pm Closing remarks