

SECOND ANNUAL  
BIOTHERMODYNAMICS CONFERENCE

SEPTEMBER 24-28, 1988

TOUCH OF NATURE  
SOUTHERN ILLINOIS UNIVERSITY  
CARBONDALE, ILLINOIS

BIOTHERMODYNAMICS CONFERENCE  
Schedule

Saturday, September 24

3:00 - 10:00 PM Registration

7:30 - 10:00 PM Open bar with refreshments. PLEASE NOTE DINNER WILL  
NOT BE SERVED ON SATURDAY.

Sunday, September 25

8:00 - 9:00 AM Breakfast

9:30 - Noon Poster session. Posters will be left up for the  
remainder of the conference.

Noon - 1:00 PM Lunch

1:30 PM Scientific session chaired by Jim Lee

1:30 - 2:10 William Van Osdol - "Multifrequency Calorimetry.  
The Frequency Dispersion of the Heat Capacity"

2:10 - 2:50 Martin Straume - Volume Perturbation Kinetic  
Calorimetry of Phospholipid Dispersions"

2:50 - 3:00 Break

3:00 - 3:20 Dorothy Beckett - "Cooperative Binding of the  
Bacteriophage Lambda CI Repressor to DNA:  
Molecular Mechanism and Consequences for In Vivo  
Function"

3:20 - 4:00 Kenneth P. Murphy - "Calorimetric Measurement of  
the Enthalpy of Dissolution of Two  
Diketopiperazines in Water as a Function of  
Temperature"

4:00 PM Opening discussion chaired by Wayne Bolen

6:00 - 7:00 Dinner

Monday, September 26

8:00 - 9:00 AM Breakfast

9:00 AM Scientific session chaired by Ken Dill

9:00 - 9:40 Michael Doyle - "Thermodynamics of the CO/O<sub>2</sub>  
Replacement Reaction of Rabbit Hemoglobin"

9:40 - 10:00 David Ownby - "Oxygen Binding by Bovine and Horse  
Hemoglobins"

10:00 - 10:40      Vincent LiCata - "Searching for the Pathway of Cooperative Free Energy Transduction in the Human Hemoglobin Molecule"

10:40 - 11:00      Break

11:00 - 11:20      Philip Speros - "Molecular Switching in Human Hemoglobin; The COII/FEII-CO Ligand Analog System"

11:20 - Noon        Madeline Shea - "Cooperative Interactions of Human Hemoglobin Intermediate States Respond Differentially to Protons"

Noon - 1:00 PM      Lunch

1:10 PM      Scientific session chaired by Michael Johnson

1:10 - 1:50        Bertrand Garcia-Moreno ~ - "Modeling Electrostatic Interactions and Site-Specific Chloride Binding in Human Hemoglobin"

1:50 - 2:10        Yingwen Huang - "Improvement in the Quality of Protein Unfolding Free Energy Measurements"

2:10 - 2:50        Marcelo Santoro - "Differential Scanning Calorimetric Studies of Wild-Type and Some Mutants Thioredoxins"

2:50 - 3:00        Break

3:00 - 3:40        Tomasz Heyduk - "Structure-Function Relationships in E.Coli cAMP Receptor Protein"

3:40 - 4:20        Arne Schon - "Thermodynamics of Intersubunit Interaction of Cholera Toxin Upon Binding to the Oligosaccharide of its Cell Surface Receptor, Ganglioside G<sub>M1</sub>"

5:30 PM      Dinner at Giant City Lodge

Tuesday, September 27

8:00 - 9:00 AM      Breakfast

9:00 AM      Scientific session chaired by Gary Ackers

9:00 - 9:40        David Burz - "Characterization of Quaternary State Wild Type and Single-Site Mutant Aspartate Transcarbamoylases by Analytical Gel Chromatography"

9:40 - 10:20       Rajiv Bhat - "The Mechanism of Preferential Hydration of Proteins in Aqueous Polyethylene Glycol Solutions"

10:20 - 10:40	Break
10:40 - 11:20	<u>Kit Lau</u> - "A Simple Statistical Mechanical Model for the Conformational and Sequence Spaces of Globular Proteins"
11:20 - Noon	<u>Hue-sun Chan</u> - "Intrachain Contacts in Proteins" Disulfide Bonds and Secondary Structures"
Noon - 1:00	Lunch
1:00 - 4:30 PM	Free time
4:30 - 6:00 PM	Social with Cash Bar
6:00 - 7:00 PM	Dinner
7:30 - 9:00 PM	Organizational meeting chaired by Gary Ackers

Wednesday. September 28

7:00 - 8:00 AM	Breakfast
9:00 AM	Checkout time