

Department of Energy
Office of Basic Energy Sciences
1983 Heterogeneous Catalysis Meeting
at National Bureau of Standards, Gaithersburg, MD

Program

Monday, November 7

Chairman: Gary L. Haller

8:30 Registration

8:40 Introductory Comments: F. Dee Stevenson

8:45 V. E. Henrich

The Role of d-Electrons in Chemisorption and Metal-Support Interactions Studied by Electron Spectroscopy

9:15 M. A. Vannice

A Study of Metal-Support Interactions in Ni, Pd, and Pt Catalysis

9:45 M. P. Rosynek

Properties of Lanthanide Oxides as Supports for Transition Metal Catalysts

10:15 Coffee

10:45 C. H. Bartholomew

Metal-Support Interactions: Their Effects Upon Adsorption, Electronic, and Activity/Selectivity Properties of Cobalt in CO Hydrogenation

11:15 J. H. Lunsford

Catalysts and Mechanisms in Synthesis Reactions

11:45 A. Brenner

Synthesis, Static, and Reactive Characterization of Supported Organometallics

12:15 R. D. Rieke

Studies on Unusually Reactive Metal Powders. Preparation of New Organometallics Including Potentially New Catalysts

12:45 Lunch

2:00 J. L. Falconer

Promoter Modifications of Catalytic Activity and Selectivity

2:30 J. W. Rathke

A New Catalytic Pathway for Methanol Synthesis

3:00 Coffee

3:45 C. P. Casey

Mechanistic Studies Related to the Metal Catalyzed Hydrogenation of Carbon Monoxide to Hydrocarbons

4:15 H. Wise

Adsorption Thermodynamics and Surface Transport of Metal Catalyst Poisons

Tuesday, November 8

Chairman: Theodore E. Madey

- 8:45 G. L. Schrader
Spectroscopic and Kinetic Characterization of Metal Oxide and Sulfide Catalysts
- 9:15 J. M. Stencel
Vibrational Spectroscopic Studies of Coal Conversion Catalysts
- 9:45 R. J. De Angelis
Structural Characterization of Dispersed Metal Catalysts
- 10:15 Coffee
- 10:45 H. Heinemann
Chemistry and Morphology of Coal Liquefaction: Reaction of Graphite and Water
- 11:15 M. Boudart
Catalytic Gasification of Carbon
- 11:45 R. J. Madix
Molecular Beam Studies of the Dynamics and Kinetics of Heterogeneous Reactions on Single Crystal Surfaces
- 12:15 R. V. Coleman
Spectroscopy of Surface Adsorbed Molecules
- 12:45 Lunch
- 2:00 H. H. Kung
Solid State, Surface and Catalytic Studies of Oxides
- 2:30 R. S. Hansen
Catalytic Reactions Associated with Coal Liquefaction and Fuel Synthesis
- 3:00 D. W. Goodman
Reaction Kinetics Over Single Crystal Catalysts
- 3:30 Coffee
- 3:45 D. M. Gruen
Structures of Adsorbate Layers and Electronic Configuration of Metal Clusters
- 4:15 S. J. Riley
Chemical Reactions of Transition Metal Clusters

Wednesday, November 9

Chairman: R. R. Rye

- 8:45 Discussion Topic
An Industrial View of Current Research on Catalysis
- 9:45 to 12:45 Discussion Topic
Which Types of Surface Science Research are Most Important to Catalysis?