

Welcome to the
Indirect Liquefaction Contractors' Review Meeting
November 6-8, 1990
Vista International Hotel
Pittsburgh, Pennsylvania

The purpose of this meeting is to review the research in progress under
this program and to promote the exchange of views and ideas.

Wednesday, November 7, 1990

8:30 a.m.
Call to Order
Gary J. Stiegel
Pittsburgh Energy Technology Center

8:35 - 8:50 a.m.
Welcome
Thomas M. Torkos
Deputy Director
Pittsburgh Energy Technology Center

8:50 - 9:20 a.m.
Keynote Address
George Rudins
Associate Deputy Assistant Secretary for Research & Development
Office of Fossil Energy
U.S. Department of Energy
Washington, DC

9:20 a.m. - 9:35 a.m.
Program Overview
Gary J. Stiegel
Pittsburgh Energy Technology Center

AGENDA

Wednesday, November 7, 1990 - Continued

GAS PROCESSING RESEARCH

Session Chairperson: G. J. Cinquegrane
Pittsburgh Energy Technology Center

9:35 a.m.	Direct Conversion of Light Hydrocarbon Gases to Liquid Fuels: Process Variable Studies M. Foral Amoco Oil Company
10:15 a.m.	BREAK
10:40 a.m.	Status of PETC's Methane-to-Higher Hydrocarbon Process C. Taylor Pittsburgh Energy Technology Center
11:20 a.m.	Light Hydrocarbon Gas Conversion J. Shelnutt Sandia National Laboratories
12:00 Noon	GROUP LUNCH
1:15 p.m.	GRI's Methane Reaction Program P. Barone Gas Research Institute
1:45 p.m.	METC's Program for Natural Gas-to-Liquids Conversion R. Malone Morgantown Energy Technology Center

OXYGENATED FUELS/FUEL ADDITIVES

Session Chairperson: G.J. Stiegel
Pittsburgh Energy Technology Center

2:15 p.m. **Heterogeneous Catalytic Conversion of
Syn-Gas to Fuel Alcohols**

G. Sheffer
J. Hippler
Union Carbide Corporation

2:55 p.m.

BREAK

3:10 p.m. **Oxygenates: Refiner's View**

S. Minner
UNOCAL

3:50 p.m. **Synthesis of Dimethyl Ether and Alternative Fuels
in the Liquid Phase from Coal-Derived Syngas**

B.L. Bhatt
Air Products & Chemicals, Inc.

4:30 p.m. **Specifications for Future Transportation Fuels**

E. Wan
Science Applications International Corp.

Thursday, November 8, 1990

**ADVANCED
FISCHER-TROPSCH SYNTHESIS**
Session Chairperson: V.U.S. Rao
Pittsburgh Energy Technology Center

8:15 a.m.	Precipitated Iron Catalyst Performance in a Slurry Autoclave Reactor H. Abrevaya UOP
8:55 a.m.	The Development of a Cobalt Catalyst for Use in Slurry Reactors H. Abrevaya UOP
9:35 a.m.	BREAK
9:50 a.m.	Development of Improved Iron Fischer-Tropsch Catalysts D. Bukur Texas A&M University
10:30 a.m.	Slurry Phase Fischer-Tropsch Synthesis: Cobalt Plus a Water-Gas-Shift Catalyst C. Satterfield Massachusetts Institute of Technology
11:10 a.m.	An Exploratory Program for Using Hydrous Metal Oxide Ion Exchangers as Fischer-Tropsch Catalysts A. Lynch Sandia National Laboratories
11:50 p.m.	GROUP LUNCH

**ALTERNATE FUELS:
PROCESS SUPPORT/ENGINEERING
EVALUATION**

Session Chairperson: R.D. Srivastava
Burns & Roe Services Corporation

1:00 p.m.	Considerations in the Selection of a Fischer-Tropsch Reactor for Synfuels Production A. Geertsema SASOL
1:30 p.m.	Experience with Fluidized Bed Fischer-Tropsch Reactors at SASOL M. Dry SASOL
2:00 p.m.	Developing Environmentally Responsible Energy Resources A. Rowley FUELCO
2:30 p.m.	BREAK
2:45 p.m.	The Hybrid Plant Concept: Combining Direct and Indirect Coal Liquefaction Processes G. Tomlinson The MITRE Corporation
3:25 p.m.	Slurry Reactor Design Studies J. Fox Bechtel Group, Inc.
4:05 p.m.	Design of Slurry Reactor for Indirect Liquefaction Applications A. Prakash Viking Systems International
4:50 p.m.	Economics of Upgrading Fischer-Tropsch Products P. Shah UOP