

2005 Hydrogen Program Annual Review Block Schedule

Monday, May 16, 2005

<u>Monday</u>			<u>Tuesday</u>			<u>Wednesday</u>			<u>Thursday</u>			
Session A (Salons V&VI)	Session B (Salons B&C)	Session C (Salons I&II)	Session A (Salons V&VI)	Session B (Salons B&C)	Session C (Salons I&II)	Session A (Salons V&VI)	Session B (Salons B&C)	Session C (Salons I&II)	Session A (Salons V&VI)	Session B (Salons B&C)	Session C (Salons I&II)	
Plenary Session			P&D	ST	FC	P&D	ST	FC	ED	S,C&S	FC	
			P&D	ST	FC	P&D	ST	FC	ED	S,C&S	FC	
			P&D	ST	FC	P&D	ST	FC	AN	S,C&S	FC	
			P&D	ST	FC	P&D	TV	FC	AN	S,C&S	FC	
			Break	Break	Break	Break	Break	Break	Break	Break	Break	Break
			P&D	ST	FC	P&D	TV	FC	AN	S,C&S	FC	
			P&D	ST	FC	P&D	TV	FC	AN	S,C&S	FC	
			P&D	ST	FC	P&D	TV	FC	AN	S,C&S	FC	
Lunch (12:30-1:45)			Lunch (12:00-1:15)			Lunch (12:00-1:15)						
P&D	ST	FC	P&D	ST	FC	P&D	TV	FC	Fuel Cell R&D Workshop			
P&D	ST	FC	P&D	ST	FC	P&D	TV	FC				
P&D	ST	FC	P&D	ST	FC	P&D	TV	FC				
P&D	ST	FC	P&D	ST	FC	P&D	TV	FC				
Break	Break	Break	Break	Break	Break	Break	Break	Break				
P&D	ST	FC	P&D	ST	FC	P&D	TV	FC				
P&D	ST	FC	P&D	ST	FC	P&D	TV	FC				
P&D	ST	FC	P&D	ST	FC	ED	TV	FC				
P&D	ST	FC	P&D	ST	FC	ED	TV	FC				
P&D	ST	FC	P&D	ST	FC	ED	TV	FC				

Storage Center of Excellence Posters (4:00 to 7:00 in Salon K)	Reception/Poster Session at the DAR (6:00-8:30)
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Note: Additional posters will be on display in the Hotel all during the Review

- Key
- P&D Production and Delivery
 - ST Storage
 - FC Fuel Cells
 - TV Technology Validation
 - ED Education
 - S,C&S Safety, Codes and Standards
 - AN Analysis

Session A - 2005 Hydrogen Program Annual Review Oral Presentations (Salons V&VI)

Schedule as of: **Monday, May 16, 2005**

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Dur.</u>	<u>Presenter</u>		<u>TDM</u>	<u>Title</u>	<u>Sub-Program Category</u>
PD 1	Mon, May 23	1:45 PM	30	Pete Devlin	Devlin	Devlin	Hydrogen Production & Delivery	NA
PD 36	Mon, May 23	2:15 PM	15	A. David Henderson			Hydrogen Production Using Nuclear Energy	Prod. Using Nuclear
PD 37	Mon, May 23	2:30 PM	10	Prof. Tom Mallock			Basic Research Needs for Hydrogen Production	
PD 2	Mon, May 23	2:40 PM	25	Greg Tao		Kauffman	A Reversible Planar Solid Oxide Fuel-Fed Electrolysis Cell and Solid Oxide Fuel Cell for Hydrogen and Electricity Production Operating on Natural Gas/Biogas	Distributed Production
PD 3	Mon, May 23	3:05 PM	25	Ravi Kumar		Anderson	Autothermal Cyclic Reforming Based Hydrogen Generating & Dispensing System	Distributed Production
		Break	3:30 PM	20				
PD 4	Mon, May 23	3:50 PM	25	David Guro		Anderson	Development of a Turnkey Hydrogen Fueling Station	Distributed Production
PD 5	Mon, May 23	4:15 PM	25	Bill Liss		Anderson	Development of a Natural Gas-to-Hydrogen Fueling System	Distributed Production
PD 6	Mon, May 23	4:40 PM	25	David King		Paster	Production of Hydrogen by Biomass Reforming	Distributed Production
PD 7	Mon, May 23	5:05 PM	30	Randy Cortright		Paster	Hydrogen Generation from Biomass-Derived Carbohydrates via the Aqueous-Phase Reforming (APR) Process	Distributed Production
		Session Ends	5:35 PM					
PD 8	Tues, May 24	8:30 AM	25	Satish Tamhankar		Anderson	Integrated Hydrogen Production, Purification & Compression System	Distributed Production
PD 9	Tues, May 24	8:55 AM	25	Frank Lomax, Jr.		Anderson	Low-Cost Hydrogen Distributed Production Systems	Distributed Production
PD 10	Tues, May 24	9:20 AM	25	Ke Liu		Anderson	Integrated Short Contact Time Hydrogen Generator	Distributed Production
PD 11	Tues, May 24	9:45 AM	30	Anthony Sammells		Schmetz/Win	Advanced Hydrogen Transport Membranes for Vision 21 Fossil Fuel Plants	DOE Fossil Energy
		Break	10:15 AM	30				
PD 12	Tues, May 24	10:45 AM	25	Brian Bischoff		Schmetz/Win	Scale-up of Microporous Inorganic Hydrogen-Separations Membranes	DOE Fossil Energy
PD 13	Tues, May 24	11:10 AM	25	Francis Lau		Paster	Low Cost Hydrogen Production from Biomass Using Novel Membrane Gasification Reactor	Separations
PD 14	Tues, May 24	11:35 AM	25	Tom Vanderspurt		Paster	A Novel Slurry-Based Biomass Reforming Process	Biomass Reforming
		Lunch	12:00 PM	75				
PD 15	Tues, May 24	1:15 PM	25	Tasios Melis		R. Garland	Maximizing Photosynthetic Efficiencies and Hydrogen Production in Microalgal Cultures	Biological Production
PD 16	Tues, May 24	1:40 PM	25	Maria Ghirardi		R. Garland	Biological Systems for Hydrogen Photoproduction	Biological Production
PD 17	Tues, May 24	2:05 PM	25	James Lee		R. Garland	Creation of Designer Alga for Efficient and Robust Production of H ₂	Biological Production
PD 18	Tues, May 24	2:30 PM	25	PinChing Maness		R. Garland	Fermentative Approaches to Hydrogen Production	Biological Production
		Break	2:55 PM	25				
PD 19	Tues, May 24	3:20 PM	25	Dan Blake		R. Garland	Hydrogen Reactor Development and Design for Photofermentation and Photolytic Processes	Biological Production
PD 20	Tues, May 24	3:45 PM	25	Eric Miller		R. Garland	Photoelectrochemical Hydrogen Production: SHGR Program Subtask	Photoelectrochemical
PD 21	Tues, May 24	4:10 PM	25	John Turner		R. Garland	Photoelectrochemical Water Systems for H ₂ Production	Photoelectrochemical
PD 22	Tues, May 24	4:35 PM	25	Eric McFarland		R. Garland	Photoelectrochemical Hydrogen Production Using New Combinatorial Chemistry Derived Materials	Photoelectrochemical
		Session Ends	5:00 PM					

PD	23	Wed, May 25	8:30 AM	25	Cecelia	Cropley	Kauffman	Low-Cost, High-Pressure Hydrogen Generator	Electrolysis
PD	24	Wed, May 25	8:55 AM	25	Steve	Herring	Henderson	High Temperature Solid Oxide Electrolyzer System	DOE Nuclear Energy
PD	25	Wed, May 25	9:20 AM	30	Ben	Kroposki	Kauffman	Renewable Electrolysis Integrated System Development and Testing	Electrolysis
		Break	9:50 AM	25					
PD	26	Wed, May 25	10:15 AM	25	Samir	Ibrahim	Kauffman	Alkaline, High Pressure Electrolysis	Electrolysis
PD	27	Wed, May 25	10:40 AM	25	Paul	Pickard	Henderson	Sulfur-Iodine Thermochemical Cycle	DOE Nuclear Energy
PD	28	Wed, May 25	11:05 AM	30	Bob	Perret	Paster	Development of Solar-powered Thermochemical Production of Hydrogen from Water	Hi-Temp Thermochemical
PD	29	Wed, May 25	11:35 AM	25	Michele	Lewis	Henderson	Alternative Thermochemical Cycle Evaluation	DOE Nuclear Energy
		Lunch	12:00 PM	75					
PD	30	Wed, May 25	1:15 PM	25	Tony	Hechanova	Henderson	High Temperature Heat Exchanger Development	DOE Nuclear Energy
PD	31	Wed, May 25	1:40 PM	25	Steve	Sherman	Henderson	NHI System Interface and Support Systems	DOE Nuclear Energy
PD	32	Wed, May 25	2:05 PM	25	Marianne	Mintz	Paster	H2A Delivery Analysis	Hydrogen Delivery
PD	33	Wed, May 25	2:30 PM	20	Zhili	Feng	Paster	Hydrogen Permeability and Integrity of Hydrogen Delivery Pipelines	Hydrogen Delivery
		Break	2:50 PM	20					
PD	34	Wed, May 25	3:10 PM	20	Guido	Pez	Paster	Reversible Liquid Carriers for an Integrated Production, Storage & Delivery of Hydrogen	Hydrogen Delivery
PD	35	Wed, May 25	3:30 PM	30	Subodh K.	Das	Paster	Materials Solutions for Hydrogen Delivery in Pipelines	Hydrogen Delivery
ED	1	Wed, May 25	4:00 PM	25	Christy	Cooper		Hydrogen Education	NA
ED	2	Wed, May 25	4:25 PM	20	Ruth	Borger	Cooper	Hydrogen/Alternative Energy Center	Education
ED	3	Wed, May 25	4:45 PM	20	John	Griffin	Cooper	Shared Technology Transfer Project	Education
		Session Ends	5:05 PM						
ED	4	Thur, May 26	8:30 AM	20	Paul	Williamson	Cooper	Montana Hydrogen Futures Project	Education
ED	5	Thur, May 26	8:50 AM	25	Barbara	Nagle	Cooper	Hydrogen Technology and Energy Curriculum (HyTEC)	Education
ED	6	Thur, May 26	9:15 AM	25	Mary	Spruill	Cooper	H2 Educate!	Education
AN	1	Thur, May 26	9:40 AM	25	Fred	Joseck		Systems Analysis	NA
AN	2	Thur, May 26	10:05 AM	25	Maggie	Mann	Joseck	Moving Toward Consistent Analysis in the HFC&IT Program: H2A	Systems Analysis
		Break	10:30 AM	20					
AN	3	Thur, May 26	10:50 AM	25	David	Greene	Joseck	Hydrogen Transition Modeling and Analysis: HYTRANS v. 1.0	Systems Analysis
AN	4	Thur, May 26	11:15 AM	25	Walter	Short	Joseck	WinDS-H2 Model and Analysis	Systems Analysis
AN	5	Thur, May 26	11:40 AM	25	Joan	Ogden	Joseck	Technical and Economic Studies of Regional Transition Strategies toward Widespread Use of Hydrogen Energy	Systems Analysis
AN	6	Thur, May 26	12:05 PM	25	Stephen	Lasher	Joseck	Fuel Choice for FCVs: Hydrogen Infrastructure Costs	Systems Analysis
		Session Ends	12:30 PM						

Session B - 2005 Hydrogen Program Annual Review Oral Presentations (Salons B&C)

Schedule as of: **Monday, May 16, 2005**

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Dur.</u>	<u>Presenter</u>		<u>TDM</u>	<u>Title</u>	<u>Sub-Program Category</u>
ST 1	Mon, May 23	1:45 PM	40	Sunita George	Satyapal Thomas	DOE/EERE DOE/BES	Hydrogen Storage	NA
ST 2	Mon, May 23	2:25 PM	90	Jim	Wang	Read	Development of Metal Hydrides at Sandia National Laboratories	Metal Hydrides
		Session Ends	3:55 PM					
ST 3	Tues, May 24	8:30 AM	25	Craig	Jensen	Read	Catalytically Enhanced Hydrogen Storage Systems	Metal Hydrides
ST 4	Tues, May 24	8:55 AM	25	Don	Anton	Read	High Density Hydrogen Storage System Demonstration Using NaAlH ₄ Complex Compound Hydrides	Metal Hydrides
ST 5	Tues, May 24	9:20 AM	25	Adriaan	Sachtler	Read	Discovery of Novel Complex Metal Hydrides for Hydrogen Storage through Molecular Modeling and Combinatorial Methods	Metal Hydrides
ST 6	Tues, May 24	9:45 AM	25	Susanne	Opalka	Read	Complex Hydride Compounds with Enhanced Hydrogen Storage Capacity	Metal Hydrides
		Break	10:10 AM					
ST 7	Tues, May 24	10:25 AM	15	Orhan	Talu	Read	Sub-Nanostructured Non-Transition Metal Complex Grids for Hydrogen Storage	New Mat'l's & Concepts
ST 8	Tues, May 24	10:50 AM	25	Samuel	Mao	Read	A Synergistic Approach to the Development of New Hydrogen Storage Materials	New Mat'l's & Concepts
ST 9	Tues, May 24	11:15 AM	25	Ralph	White	Read	Clean Energy Research at the University of South Carolina	New Mat'l's & Concepts
ST 10	Tues, May 24	11:40 AM	20	Lee	Stefanakos	Read	Fuel Cell and Hydrogen Research University of South Florida	New Mat'l's & Concepts
		Lunch	12:00 PM					
ST 11	Tues, May 24	1:15 PM	60	Bill	Tumas	Satyapal	Center of Excellence for Chemical Hydrogen Storage	Chemical Hydrides
ST 12	Tues, May 24	2:15 PM	25	Ying	Wu	Satyapal	Process for the Regeneration of Sodium Borate to Sodium Borohydride for Use as a Hydrogen Storage Source	Chemical Hydrides
ST 13	Tues, May 24	2:40 PM	25	Andy	McClaine	Satyapal	Chemical Hydride Slurry for Hydrogen Production and Storage	Chemical Hydrides
		Break	3:05 PM					
ST 14	Tues, May 24	3:25 PM	20	Alan	Cooper	Satyapal	Development of New Carbon-Based Sorbent Systems for an Effective Containment of Hydrogen	Chemical Hydrides
ST 15	Tues, May 24	3:50 PM	25	Jui	Ko	Satyapal	Low Cost, High Efficiency, High Pressure Hydrogen Storage	Compressed/Liquid Tanks
ST 16	Tues, May 24	4:15 PM	25	Salvador	Aceves	Satyapal	Advanced Concepts for Containment of Hydrogen and Hydrogen Storage Materials	Compressed/Liquid Tanks
ST 17	Tues, May 24	4:40 PM	25	Chuck	Ryan	Milliken	Advanced Manufacturing Technologies for Renewable Energy Applications	New Mat'l's & Concepts
		Session Ends	5:05 PM					

ST	18	Wed, May 25	8:00 AM	90	Mike	Heben	Satyapal	DOE Carbon-based Materials Center of Excellence: NREL Activities and Overview	Carbon Materials
ST	19	Wed, May 25	9:30 AM	25	Stephen	Lasher	Satyapal	Analyses of Hydrogen Storage Materials and On-Board Systems	Testing & Analysis
		<u>Break</u>	<u>9:55 AM</u>	20					
ST	20	Wed, May 25	10:15 AM	25	Rajesh	Ahluwalia	Satyapal	System Level Analysis of Hydrogen Storage Options	Testing & Analysis
ST	21	Wed, May 25	10:40 AM	25	Richard	Page	Satyapal	Standardized Testing Program for Chemical Hydride and Carbon Storage Technologies	Testing & Analysis
TV	1	Wed, May 25	11:05 AM	30	Sig	Gronich		Technology Validation Sub-Program	NA
TV	2	Wed, May 25	11:35 AM	25	Rob	Regan	Gronich	DTE Energy Hydrogen Technology Park	Power Parks Analysis
		<u>Lunch</u>	<u>12:00 PM</u>	75					
TV	3	Wed, May 25	1:15 PM	20	Richard	Rocheleau	Gronich	Hawaii Hydrogen Center for Development and Deployment of Distributed Energy Systems	Power Parks Analysis
TV	4	Wed, May 25	1:35 PM	20	Raymond	Hobbs	Gronich	Hydrogen Power Park - Business Opportunities Concept Project	Power Parks Analysis
TV	5	Wed, May 25	1:55 PM	30	Greg	Keenan	Gronich	Validation of an Integrated System for a Hydrogen- Fueled Power Park	Power Parks Analysis
TV	6	Wed, May 25	2:25 PM	25	Todd	Carlson	Gronich	Novel Compression and Fueling Apparatus to Meet Hydrogen Vehicle Range Requirements	Refueling Tech. Dev. & Demo.
TV	7	Wed, May 25	2:50 PM	25	Keith	Wipke	Gronich	Controlled Hydrogen Fleet & Infrastructure Analysis	Systems Analysis
		<u>Break</u>	<u>3:15 PM</u>	20					
TV	8	Wed, May 25	3:35 PM	20	Mark	Pedersen	Gronich	California Hydrogen Infrastructure Project	Vehicle Demonstrations
TV	9	Wed, May 25	3:55 PM	20	Klaus	BonHoff	Gronich	Controlled Hydrogen Fleet and Infrastructure Demonstration and Validation Project	Vehicle Demonstrations
TV	10	Wed, May 25	4:15 PM	20	Greg	Frenette	Gronich	Hydrogen Fuel Cell Vehicle & Infrastructure Demonstration Program Review	Vehicle Demonstrations
TV	11	Wed, May 25	4:35 PM	20	Rajesh	Paulose	Gronich	Controlled Hydrogen Fleet and Infrastructure Demonstration and Validation Project	Vehicle Demonstrations
TV	12	Wed, May 25	4:55 PM	20	Roz	Sell	Gronich	Hydrogen Vehicle and Infrastructure Demonstration and Validation	Vehicle Demonstrations
		<u>Session Ends</u>	<u>5:15 PM</u>						
SA	1	Thur, May 26	8:30 AM	30	Patrick	Davis	Davis	Safety, Codes and Standards	NA
SA	2	Thur, May 26	9:00 AM	30	Jim	Ohi	Davis	Hydrogen Codes and Standards	Safety, Codes & Stans.
SA	3	Thur, May 26	9:30 AM	30	Jay	Keller	Davis	Research and Development for Hydrogen Safety, Codes and Standards	Safety, Codes & Stans.
		<u>Break</u>	<u>10:00 AM</u>	30					
SA	4	Thur, May 26	10:30 AM	30	Cathy	Padro	Davis	International Standards and Regulations	Safety, Codes & Stans.
SA	5	Thur, May 26	11:00 AM	30	Bruce	Kinzey	Davis	HAMMER Emergency Response Training for the Hydrogen Economy	Safety, Codes & Stans.
SA	6	Thur, May 26	11:30 AM	30	Steven	Weiner	Davis	Hydrogen Safety Review Panel	Safety, Codes & Stans.
		<u>Session Ends</u>	<u>12:00 PM</u>						

Session C - 2005 Hydrogen Program Annual Review Oral Presentations (Salons I&II)

Schedule as of: **Monday, May 16, 2005**

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Dur.</u>	<u>Presenter</u>	<u>TDM</u>	<u>Title</u>	<u>Sub-Program Category</u>
FC 1	Mon, May 23	1:45 PM	20	Valri Lightner		Fuel Cell R&D	NA
FC 51	Mon, May 23	2:05 PM	10	Dr. Paul Maupin		Fuel Cells Basic Research	
FC 2	Mon, May 23	2:15 PM	30	Emory DeCastro	Manheim	Integrated Manufacturing for Advanced MEAs	MEAs
FC 3	Mon, May 23	2:45 PM	30	Mark Debe	Manheim	Advanced MEAs for Enhanced Operating Conditions, Amenable to High Volume Manufacture	MEAs
		Break	3:15 PM	15			
FC 4	Mon, May 23	3:30 PM	25	Lesia Protsailo	Manheim	Development of High Temperature Membranes and Improved Cathode Catalysts for PEM Fuel Cells	MEAs
FC 5	Mon, May 23	3:55 PM	25	Mahlon Wilson	Garland	Electrocatalyst Supports and Electrode Structures	MEAs
FC 6	Mon, May 23	4:20 PM	30	Tom Zawodzinski	Garland	Development of New Polymer Electrolytes for Operation at High Temperature and Low Relative Humidity	Membranes & MEAs
FC 7	Mon, May 23	4:50 PM	25	Debbie Myers	Garland	High-Temperature Polymer Electrolyte Membranes	Membranes & MEAs
FC 8	Mon, May 23	5:15 PM	25	Rhonda Staudt	Epping	Development of Polybenzimidazole-based, High Temperature Membrane and Electrode Assemblies for Stationary and Automotive Applications	Membranes & MEAs
		Session Ends	5:40 PM				
FC 9	Tues, May 24	8:30 AM	25	Gonzalo Escobedo	Manheim	Enabling Commercial PEM Fuel Cells with Breakthrough Lifetime Improvements	Membranes & MEAs
FC 10	Tues, May 24	8:55 AM	25	Phil Ross	Garland	New Electrocatalysts for Fuel Cells	Catalysts
FC 11	Tues, May 24	9:20 AM	25	Piotr Zelenay	Garland	Non-Precious Metal Catalysts	Catalysts
FC 12	Tues, May 24	9:45 AM	25	Mike Hicks	Epping	MEA and Stack Durability for PEM Fuel Cells	Membranes & MEAs
		Break	10:10 AM	30			
FC 13	Tues, May 24	10:40 AM	25	Stephen Campbell	Ho	Development of transition metal/ chalcogen based cathode catalysts for PEM fuel cells	Catalysts
FC 14	Tues, May 24	11:05 AM	25	Radoslav Atanasoski	Ho	Novel Approach to Non-Precious Metal Catalysts	Catalysts
FC 15	Tues, May 24	11:30 AM	25	Branko N. Popov	Ho	Novel Non-Precious Metals for PEMFC: Catalyst Selection through Molecular Modeling and Durability Studies	Catalysts
		Lunch	12:00 PM	75			
FC 16	Tues, May 24	1:15 PM	20	Karen Swider-Lyons	Garland	Low-Platinum Catalysts for Oxygen Reduction at PEMFC Cathodes	Catalysts
FC 17	Tues, May 24	1:35 PM	25	Radoslav Adzic	Garland	Low Pt Loading Fuel Cell Electrocatalysts	Catalysts
FC 18	Tues, May 24	2:00 PM	25	Michel Foure	Manheim	Development of a Low-Cost, Durable Membrane and MEA for Stationary and Mobile Fuel Cell Applications	Membranes & MEAs
FC 19	Tues, May 24	2:25 PM	20	Paolina Atanassova	Manheim	Development of High-Performance, Low-Pt Cathodes Containing New Catalysts and Layer Structures	Catalysts
FC 20	Tues, May 24	2:45 PM	20	Stephen Grot	Anderson	Platinum Recycling Technology Development	Platinum Recycling
		Break	3:05 PM	20			
FC 21	Tues, May 24	3:25 PM	20	Larry Shore	Anderson	Platinum Group Metal Recycling Technology Development	Platinum Recycling
FC 22	Tues, May 24	3:45 PM	25	David Haack	Ho	Scale-Up of Carbon/Carbon Bipolar Plates	Bipolar Plates
FC 23	Tues, May 24	4:10 PM	20	Karren More	Garland	Cost-Effective Surface Modification for Metallic Bipolar Plates	Bipolar Plates
FC 24	Tues, May 24	4:30 PM	20	Theodore Krause	Garland	Water Gas Shift Catalysis	Fuel Processing
FC 25	Tues, May 24	4:50 PM	20	Theodore Krause	Garland	Catalysts for Autothermal Reforming	Fuel Processing
		Session Ends	5:10 PM				

FC 26	Wed, May 25	8:30 AM	20	Viviane	Schwartz	Garland	Selective Catalytic Oxidation of Hydrogen Sulfide	Fuel Processing
FC 27	Wed, May 25	8:50 AM	25	Mark K.	Gee	Garbak	Cost and Performance Enhancements for a PEM Fuel Cell Turbocompressor	Trans. Sys & BOP
FC 28	Wed, May 25	9:15 AM	25	Sterling	Bailey	Garbak	Development and Testing of a Toroidal Intersecting Vane Machine (TIVM) Air Management System	Trans. Sys & BOP
FC 29	Wed, May 25	9:40 AM	25	Giullermo	Pont	Ho	Development of a Thermal and Water Management (TWM) System for PEM Fuel Cells	Trans. Sys & BOP
		Break	15					
FC 30	Wed, May 25	10:05 AM	25	Brian	Knight	Ho	Development of Sensors for Automotive PEM-based Fuel Cells	Trans. Sys & BOP
FC 31	Wed, May 25	10:20 AM	25	Richard	Gehman	Ho	2005 DOE Hydrogen Program Sensor Development	Trans. Sys & BOP
FC 32	Wed, May 25	10:45 AM	25	Bob	Sievers	Ho	DMFC Prototype Demonstration for Consumer Electronics Applications	Auxiliary/Portable Power
FC 33	Wed, May 25	11:10 AM	25	Brian	Wells	Ho	DMFC Power Supply for All-Day True-Wireless Mobile Computing	Auxiliary/Portable Power
		Lunch	75					
FC 34	Wed, May 25	12:00 PM	25	Piotr	Zelenay	Garland	Direct Methanol Fuel Cells	Auxiliary/Portable Power
FC 35	Wed, May 25	1:15 PM	25	Rajesh	Ahluwalia	Garland	Fuel Cell Systems Analysis	Trans. Sys & BOP
FC 36	Wed, May 25	1:40 PM	25	J. David	Carter	Garland	Bipolar Plate-Supported Solid Oxide Fuel Cell "Tuffcell"	Auxiliary/Portable Power
FC 37	Wed, May 25	2:05 PM	25	Fernando	Garzon	Garland	Effect of Fuel and Air Impurities on Fuel Cell Performance	Fuel Cell Characterization
		Break	25					
FC 38	Wed, May 25	2:30 PM	25	Muhammat	Arif	Garland	Neutron Imaging Study of the Water Transport Mechanism in a Working Fuel Cell	Fuel Cell Characterization
FC 39	Wed, May 25	3:20 PM	25	Karren	More	Garland	Microstructural Characterization Of PEM Fuel Cell MEAs	Fuel Cell Characterization
FC 40	Wed, May 25	3:45 PM	25	Rodney	Borup	Garland	PEM Fuel Cell Durability	Fuel Cell Characterization
FC 41	Wed, May 25	4:10 PM	25	Yu Seung	Kim	Garland	Sub-Freezing Fuel Cell Effects	Cold Operation
FC 50	Wed, May 25	4:35 PM	25	John	Newman	Garland	Investigating Failure in Polymer-Electrolyte Fuel Cells	Fuel Cell Characterization
		Session Ends						
FC 42	Thur, May 26	5:00 PM	25	Tim	McIntyre	Garland	Fiber Optic Temperature Sensors for PEM Fuel Cells	Trans. Sys & BOP
FC 43	Thur, May 26	8:30 AM	25	Erik	Simpkins	Garbak	Research and Development for Off-road Fuel Cell Applications	Auxiliary/Portable Power
FC 44	Thur, May 26	8:55 AM	25	Jim	Stevens	Epping	50 kW Absorption Enhanced Natural Gas Reformer	Fuel Processing
FC 45	Thur, May 26	9:20 AM	25	Tom	Holmes	Epping	Cost-effective High-efficiency Advanced Reforming Module	Fuel Processing
		Break	15					
FC 46	Thur, May 26	10:10 AM	25	Tom	Clark	Epping	150 kW PEM Fuel Cell Power Plant Verification	Stationary Power Systems
FC 47	Thur, May 26	10:25 AM	25	John	Vogel	Epping	Back-up/Peak-Shaving Fuel Cells	Stationary Power Systems
FC 48	Thur, May 26	10:50 AM	20	Harry J.	Stone	Epping	Economic Analysis of Stationary PEM Fuel Cell Systems	Stationary Power Systems
FC 49	Thur, May 26	11:15 AM	25	Kyle	Taylor	Epping	Advanced Buildings PEM Fuel Cell System	Stationary Power Systems
		Session Ends						

2005 DOE HYDROGEN PROGRAM REVIEW

Production and Delivery Oral Presentations - Session A (Salons V&VI)

Schedule as of: Monday, May 16, 2005

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Presenter</u>	<u>Organization</u>	<u>DOE TDM</u>	<u>Title</u>	<u>Sub-Program Category</u>
PD 1	Mon, May 23	1:45 PM	Pete Devlin	DOE		Hydrogen Production & Delivery	
PD 36	Mon, May 23	2:15 PM	A. David Henderson	DOE		Hydrogen Production Using Nuclear Energy	
PD 37	Mon, May 23	2:30 PM	Prof. Tom Mallock	Penn State Univ.		Basic Research Needs for Hydrogen Production	
PD 2	Mon, May 23	2:40 PM	Greg Tao	MSRI	Kauffman	A Reversible Planar Solid Oxide Fuel-Fed Electrolysis Cell and Solid Oxide Fuel Cell for Hydrogen and Electricity	Distributed Production
PD 3	Mon, May 23	3:05 PM	Ravi Kumar	GE Energy	Anderson	Autothermal Cyclic Reforming Based Hydrogen Generating & Dispensing System	Distributed Production
		Break					
PD 4	Mon, May 23	3:30 PM	David Guro	Air Products	Anderson	Development of a Turnkey Hydrogen Fueling Station	Distributed Production
PD 5	Mon, May 23	4:15 PM	Bill Liss	GTI	Anderson	Development of a Natural Gas-to-Hydrogen Fueling System	Distributed Production
PD 6	Mon, May 23	4:40 PM	David King	PNNL	Paster	Production of Hydrogen by Biomass Reforming	Distributed Production
PD 7	Mon, May 23	5:05 PM	Randy Cortright	Virent Energy Sys.	Paster	Hydrogen Generation from Biomass-Derived Carbohydrates via the Aqueous-Phase Reforming (APR) Process	Distributed Production
		Session Ends					
PD 8	Tues, May 24	8:30 AM	Satish Tamhankar	BOC Group, Inc.	Anderson	Integrated Hydrogen Production, Purification & Compression System	Distributed Production
PD 9	Tues, May 24	8:55 AM	Frank Lomax, Jr.	H2Gen Inno. Inc.	Anderson	Low-Cost Hydrogen Distributed Production Systems	Distributed Production
PD 10	Tues, May 24	9:20 AM	Ke Liu	GE Global Res.	Anderson	Integrated Short Contact Time Hydrogen Generator	Distributed Production
PD 11	Tues, May 24	9:45 AM	Anthony Sammells	Eltron Res. Inc.	Schmetz/Wir	Advanced Hydrogen Transport Membranes for Vision 21 Fossil Fuel Plants	DOE Fossil Energy
		Break					
PD 12	Tues, May 24	10:45 AM	Brian Bischoff	ORNL	Schmetz/Wir	Scale-up of Microporous Inorganic Hydrogen-Separations Membranes	DOE Fossil Energy
PD 13	Tues, May 24	11:10 AM	Francis Lau	GTI	Paster	Low Cost Hydrogen Production from Biomass Using Novel Membrane Gasification Reactor	Separations
PD 14	Tues, May 24	11:35 AM	Tom Vanderspurt	United Tech. Res.Ctr.	Paster	A Novel Slurry-Based Biomass Reforming Process	Biomass Reforming
		Lunch					
PD 15	Tues, May 24	1:15 PM	Tasios Melis	UC Berkeley	R. Garland	Maximizing Photosynthetic Efficiencies and Hydrogen Production in Microalgal Cultures	Biological Production
PD 16	Tues, May 24	1:40 PM	Maria Ghirardi	NREL	R. Garland	Biological Systems for Hydrogen Photoproduction	Biological Production
PD 17	Tues, May 24	2:05 PM	James Lee	ORNL	R. Garland	Creation of Designer Alga for Efficient and Robust Production of H2	Biological Production
PD 18	Tues, May 24	2:30 PM	PinChing Maness	NREL	R. Garland	Fermentative Approaches to Hydrogen Production	Biological Production
		Break					
PD 19	Tues, May 24	3:20 PM	Dan Blake	NREL	R. Garland	Hydrogen Reactor Development and Design for Photofermentation and Photolytic Processes	Biological Production
PD 20	Tues, May 24	3:45 PM	Eric Miller	U of Hawaii	R. Garland	Photoelectrochemical Hydrogen Production: SHGR Program Subtask	Photoelectrochemical
PD 21	Tues, May 24	4:10 PM	John Turner	NREL	R. Garland	Photoelectrochemical Water Systems for H2 Production	Photoelectrochemical
PD 22	Tues, May 24	4:35 PM	Eric McFarland	U of Cal. Santa Barbara	R. Garland	Photoelectrochemical Hydrogen Production Using New Combinatorial Chemistry Derived Materials	Photoelectrochemical
		Session Ends					

PD	23	Wed, May 25	8:30 AM	Cecelia Cropley	Giner Electrochemical	Kauffman	Low-Cost, High-Pressure Hydrogen Generator	Electrolysis	
PD	24	Wed, May 25	8:55 AM	Steve Herring	INEEL	Henderson	High Temperature Solid Oxide Electrolyzer System	DOE Nuclear Energy	
PD	25	Wed, May 25	9:20 AM	Ben Kroposki	NREL	Kauffman	Renewable Electrolysis Integrated System Development and Testing	Electrolysis	
		Break 9:50 AM							
PD	26	Wed, May 25	10:15 AM	Samir Ibrahim	Teledyne	Kauffman	Alkaline, High Pressure Electrolysis	Electrolysis	
PD	27	Wed, May 25	10:40 AM	Paul Pickard	INL/SNL	Henderson	Sulfur-Iodine Thermochemical Cycle	DOE Nuclear Energy	
PD	28	Wed, May 25	11:05 AM	Bob Perret	Univ. of Nevada	Paster	Development of Solar-powered Thermochemical Production	Hi-Temp Thermochemical	
PD	29	Wed, May 25	11:35 AM	Michele Lewis	ANL	Henderson	Alternative Thermochemical Cycle Evaluation	DOE Nuclear Energy	
		Lunch 12:00 PM							
PD	30	Wed, May 25	1:15 PM	Tony Hechanova	UNLV	Henderson	High Temperature Heat Exchanger Development	DOE Nuclear Energy	
PD	31	Wed, May 25	1:40 PM	Steve Sherman	INL	Henderson	NHI System Interface and Support Systems	DOE Nuclear Energy	
PD	32	Wed, May 25	2:05 PM	Marianne Mintz	ANL	Paster	H2A Delivery Analysis	Hydrogen Delivery	
PD	33	Wed, May 25	2:30 PM	Zhili Feng	ORNL	Paster	Hydrogen Permeability and Integrity of Hydrogen Delivery Pipelines	Hydrogen Delivery	
		Break 2:50 PM							
PD	34	Wed, May 25	3:10 PM	Guido Pez	Air Products	Paster	Reversible Liquid Carriers for an Integrated Production, Storage & Delivery of Hydrogen	Hydrogen Delivery	
PD	35	Wed, May 25	3:30 PM	Subodh K. Das	Secat, Inc.	Paster	Materials Solutions for Hydrogen Delivery in Pipelines	Hydrogen Delivery	

Production and Delivery Poster Presentations

Monday Afternoon (Outside Salons IV, V, and VI)

Schedule as of: **Monday, May 16, 2005**

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Presenter</u>	<u>Organization</u>	<u>DOE TDM</u>	<u>Title</u>	<u>Sub-Program Category</u>
PDP 29	Mon, May 23	1:45-5:00	Tasios Melis	UC Berkeley	R. Garland	Maximizing Light Utilization Efficiency & Hydrogen Production in Microalgal Cultures	Biological Production
PDP 30	Mon, May 23	1:45-5:00	Juergen Polle	Adv. Bionutrition Corp	R. Garland	Novel Two-Stage Process for Photobiological Hydrogen Production	Biological Production
PDP 31	Mon, May 23	1:45-5:00	Hamilton Smith	J. Craig Venter Inst.	R. Garland	Hydrogen from Water in a Novel Recombinant Oxygen-Tolerant Cyanobacteria System	Biological Production
PDP 33	Mon, May 23	1:45-5:00	Brent MacQueen	SRI International	R. Garland	Discovery of Photocatalysts for Hydrogen Production	Photoelectrochemical
PDP 34	Mon, May 23	1:45-5:00	Thomas McNulty	GE Global Research	R. Garland	Solar Water Splitting: Photocatalyst Materials Discovery & Systems Development	Photoelectrochemical
PDP 35	Mon, May 23	1:45-5:00	Liwei Xu	Midwest Optoelectronics	R. Garland	Critical Research for Cost-Effective Photoelectrochemical Production of Hydrogen	Photoelectrochemical
PDP 36	Mon, May 23	1:45-5:00	John Peters	Montana State U.	R. Garland	Bioinspired Composite Nanomaterials for Photocatalytic Hydrogen Production	Photoelectrochemical
PDP 37	Mon, May 23	1:45-5:00	Arun Madan	MVSystems, Inc.	R. Garland	Photoelectrochemical Hydrogen Production	Photoelectrochemical
PDP 38	Mon, May 23	1:45-5:00	Neal Woodbury	Arizona State U.	Kauffman	Development of Water Splitting Catalysts Using a Novel Molecular Evolution Approach	Photoelectrochemical
PDP 39	Mon, May 23	1:45-5:00	Donald Pile	SNL	Kauffman	Hydrogen Production - Increasing the Efficiency of Water Electrolysis	Electrolysis
PDP 41	Mon, May 23	1:45-5:00	Stephen Porter	Proton Energy Systems	Kauffman	Hydrogen Generation from Electrolysis	Electrolysis
PDP 42	Mon, May 23	1:45-5:00	James Ruud	GE Global Research	Kauffman	System Design and New Materials for Reversible Solid-Oxide, High-Temperature Steam Electrolysis	Electrolysis
PDP 43	Mon, May 23	1:45-5:00	Iouri Balachov	SRI International	Kauffman	Modular System for Hydrogen Generation & Oxygen Recovery	Electrolysis
PDP 44	Mon, May 23	1:45-5:00	Alan Weimer	U of Colorado	Kauffman	Fundamentals of a Solar-thermal Mn ₂ O ₃ /MnO Thermochemical Cycle to Split Water	Hi-Temp Thermochemical
PDP 45	Mon, May 23	1:45-5:00	Bill Summers	SRS	Henderson	Hybrid Sulfur Thermochemical Process Development	DOE Nuclear Energy
PDP 58	Mon, May 23	1:45-5:00	Xunming Deng	U of Toledo	R. Garland	Production of Hydrogen for Clean and Renewable Sources of Energy for Fuel Cell Vehicles	Photoelectrochemical

Tuesday Afternoon (Outside Salons IV, V, and VI)

Schedule as of: **Monday, May 16, 2005**

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Presenter</u>	<u>Organization</u>	<u>DOE TDM</u>	<u>Title</u>	<u>Sub-Program Category</u>
PDP 1	Tues, May 24	1:30-5:00	Liang Shih Fan	Ohio State Un.	Schmetz/Wir	Enhanced Hydrogen Production Integrated with CO ₂ Separation in a Single-Stage Reactor	DOE Fossil Energy
PDP 3	Tues, May 24	1:30-5:00	Joseph Schwartz	Praxair	Anderson	Integrated Ceramic Membrane System for Hydrogen Production	Distributed Production
PDP 4	Tues, May 24	1:30-5:00	Tim Aaron	Praxair	Anderson	Low Cost Hydrogen Production Platform	Distributed Production
PDP 5	Tues, May 24	1:30-5:00	Norm Bessette	Nisource Energy Tech.	Anderson	Solid Oxide Fuel Cell Carbon Sequestration	Production
PDP 7	Tues, May 24	1:30-5:00	Shabbir Ahmed	ANL	Anderson	High Pressure Distributed Ethanol Reforming	Distributed Production
PDP 8	Tues, May 24	1:30-5:00	Paul Anders Erickson	U Cal., Davis	Schmetz/Wir	Hydrogen Production for Fuel Cells via Reforming of Coal-Derived Methanol	DOE Fossil Energy
PDP 9	Tues, May 24	1:30-5:00	Paul KT Liu	Media & Process Tech.	Schmetz/Wir	Hydrogen Production via a Commercially Ready Inorganic Membrane Reactor	DOE Fossil Energy
PDP 10	Tues, May 24	1:30-5:00	Richard Bourgeois	GE Global Research	Anderson	New York State Hi-Way Initiative	Electrolysis
PDP 11	Tues, May 24	1:30-5:00	Jerry Y.S. Lin	U. of Cincinnati	Anderson	Zeolite Membrane Reactor for Water-Gas-Shift Reaction for Hydrogen Production	Separations
PDP 12	Tues, May 24	1:30-5:00	Joseph Hartvigsen	Ceramatec Inc.	Kauffman	Large Area Cell for Hybrid Solid Oxide Fuel Cell Hydrogen Co-Generation Process	Electrolysis
	Tues, May 24	1:45-5:00	Symone Christine Santana de Araujo	Brazilian Ministry of Mines and Energy		Brazilian Roadmap for a Hydrogen Economy	International Activities

Wednesday Morning (Outside Salons IV, V, and VI)Schedule as of: **Monday, May 16, 2005**

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Presenter</u>	<u>Organization</u>	<u>DOE TDM</u>	<u>Title</u>	<u>Sub-Program Category</u>
PDP 27	Wed, May 25	9:00-12:00	David Lynch	Startech Environmental	Paster	Startech Hydrogen Production	Biomass Reforming
PDP 46	Wed, May 25	9:00-12:00	Martin Shimko	Gas Equip. Engr. Corp.	Paster	Combined Reverse-Brayton Joule-Thompson Hydrogen Liquefaction Cycle	Hydrogen Delivery
PDP 47	Wed, May 25	9:00-12:00	Robert Thompson	New Concepts Res. Corp	Paster	Active Magnetic Regenerative Liquefier (AMRL) Development	Hydrogen Delivery
PDP 48	Wed, May 25	9:00-12:00	Petros Sofronis	U. of Illinois	Paster	Hydrogen Embrittlement of Pipeline Steels: Causes & Remediation	Hydrogen Delivery
PDP 49	Wed, May 25	9:00-12:00	Eileen Schmura	Concurrent Tech. Corp	Paster	Hydrogen Regional Infrastructure Program in Pennsylvania	Hydrogen Delivery
PDP 50	Wed, May 25	9:00-12:00	Tan-Ping Chen	Nexant Inc.	Paster	Hydrogen Delivery Infrastructure Options Analysis	Hydrogen Delivery
PDP 51	Wed, May 25	9:00-12:00	Barton Smith	ORNL	Paster	New Materials for Hydrogen Pipelines	Hydrogen Delivery
PDP 52	Wed, May 25	9:00-12:00	Thad Adams	SRNL	Paster	Evaluation of Natural Gas Pipeline Materials and Infrastructure for Hydrogen/Hythane Service	Hydrogen Delivery
PDP 53	Wed, May 25	9:00-12:00	David Livengood	ANL	Paster	Novel Hydrogen Screw Compressor	Hydrogen Delivery
PDP 54	Wed, May 25	9:00-12:00	Salvador Aceves	LLNL	Paster	Inexpensive Delivery of Compressed Hydrogen with Advanced Vessel Technology	Hydrogen Delivery
PDP 55	Wed, May 25	9:00-12:00	Bob Evans	NREL	Paster	Distributed Bio-Oil Reforming	Distributed Production
PDP 57	Wed, May 25	9:00-12:00	Michael Martin	Edison Materials Tech Center	R. Garland	Developing Improved Materials to Support the Hydrogen Economy	Cross-Cutting

Wednesday Afternoon (Outside Salons IV, V, and VI)Schedule as of: **Monday, May 16, 2005**

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Presenter</u>	<u>Organization</u>	<u>DOE TDM</u>	<u>Title</u>	<u>Sub-Program Category</u>
PDP 14	Wed, May 25	1:30-5:00	Balu Balachandran	ANL	Schmetz/Wir	Development of Dense Ceramic Membranes for Hydrogen Separation	DOE Fossil Energy
PDP 15	Wed, May 25	1:30-5:00	Christopher Chen	Air Products	Anderson	Ceramic Membrane Reactor Systems for Converting Natural Gas to Hydrogen and Synthesis Gas (ITM Syngas)	Distributed Production
PDP 16	Wed, May 25	1:30-5:00	Bruce Lanning	SwRI	Schmetz/Wir	Cost-Effective Method for Producing Self-Supporting Pd Alloy Membrane for Use in the Efficient Production of Coal-derived Hydrogen	DOE Fossil Energy
PDP 17	Wed, May 25	1:30-5:00	Tina Nenoff	SNL	Anderson	Defect-Free Thin Film Membranes for H2 Separation and Isolation	Separations
PDP 18	Wed, May 25	1:30-5:00	Brian Bischoff	ORNL	Anderson	Inorganic Membrane Porous Support Tube Fabrication	Separations
PDP 19	Wed, May 25	1:30-5:00	Brian Bischoff	ORNL	Henderson	Membrane Applications for Nuclear Hydrogen Production Processes	DOE Nuclear Energy
PDP 20	Wed, May 25	1:30-5:00	Dane Wilson	ORNL	Henderson	Materials for High-Temperature Thermochemical Processes	DOE Nuclear Energy
PDP 21	Wed, May 25	1:30-5:00	Andrew Payzant	ORNL	Anderson	Ion Transport Membranes for Hydrogen Separation	Separations
PDP 22	Wed, May 25	1:30-5:00	Paul KT Liu	Media & Process Tech.	Anderson	Water-Gas-Shift Reaction via a Single-Stage Low Temperature Membrane Reactor	Separations
PDP 24	Wed, May 25	1:30-5:00	Francis Lau	GTI	Schmetz/Wir	A Novel Membrane Reactor for Hydrogen Production from Coal	DOE Fossil Energy
PDP 25	Wed, May 25	1:30-5:00	Richard Killmeyer	NETL	Schmetz/Wir	Hydrogen Separation	DOE Fossil Energy
PDP 26	Wed, May 25	1:30-5:00	Scott Hopkins	Pall Corp.	Anderson	High-Performance, Durable, Palladium-Alloy Membrane for Hydrogen Separation & Purification	Separations
PDP 28	Wed, May 25	1:30-5:00	Tom Maloney	Northern Power Sys.	Kauffman	VERMONT Renewable Hydrogen Fueling System	Electrolysis

2005 DOE HYDROGEN PROGRAM REVIEW

Fuel Cell Oral Presentations - Session C (Salons I and II)

Schedule as of: **Monday, May 16, 2005**

Number	Date	Time	Presenter	Organization	DOE TDM	Title	Sub-Program Category
FC 1	Mon, May 23	1:45 PM	Valri Lightner	DOE		Fuel Cell R&D	NA
FC 51	Mon, May 23	2:05 PM	Dr. Paul Maupin	DOE/BES		Fuel Cells Basic Research	
FC 2	Mon, May 23	2:15 PM	Emory DeCastro	De Nora	Manheim	Integrated Manufacturing for Advanced MEAs	MEAs
FC 3	Mon, May 23	2:45 PM	Mark Debe	3M	Manheim	Advanced MEAs for Enhanced Operating Conditions, Amenable to High Volume Manufacture	MEAs
		Break					
FC 4	Mon, May 23	3:15 PM	Lesia Protsailo	UTC	Manheim	Development of High Temperature Membranes and Improved Cathode Catalysts for PEM Fuel Cells	MEAs
FC 5	Mon, May 23	3:55 PM	Mahlon Wilson	LANL	Garland	Electrocatalyst Supports and Electrode Structures	MEAs
FC 6	Mon, May 23	4:20 PM	Tom Zawodzinski	Case West. Res. Un.	Garland	Development of New Polymer Electrolytes for Operation at High Temperature and Low Relative Humidity	Membranes & MEAs
FC 7	Mon, May 23	4:50 PM	Debbie Myers	ANL	Garland	High-Temperature Polymer Electrolyte Membranes	Membranes & MEAs
FC 8	Mon, May 23	5:15 PM	Rhonda Staudt	Plug Power	Epping	Development of Polybenzimidazole-based, High Temperature Membrane and Electrode Assemblies for Stationary and Automotive Applications	Membranes & MEAs
		Session Ends	5:40 PM				
FC 9	Tues, May 24	8:30 AM	Gonzalo Escobedo	Dupont	Manheim	Enabling Commercial PEM Fuel Cells with Breakthrough Lifetime Improvements	Membranes & MEAs
FC 10	Tues, May 24	8:55 AM	Phil Ross	LBNL	Garland	New Electrocatalysts for Fuel Cells	Catalysts
FC 11	Tues, May 24	9:20 AM	Piotr Zelenay	LANL	Garland	Non-Precious Metal Catalysts	Catalysts
FC 12	Tues, May 24	9:45 AM	Mike Hicks	3M	Epping	MEA and Stack Durability for PEM Fuel Cells	Membranes & MEAs
		Break	10:10 AM				
FC 13	Tues, May 24	10:40 AM	Stephen Campbell	Ballard	Ho	Development of transition metal/ chalcogen based cathode catalysts for PEM fuel cells	Catalysts
FC 14	Tues, May 24	11:05 AM	Radoslav Atanasoski	3M	Ho	Novel Approach to Non-Precious Metal Catalysts	Catalysts
FC 15	Tues, May 24	11:30 AM	Branko N. Popov	U of So. Carolina	Ho	Novel Non-Precious Metals for PEMFC: Catalyst Selection through Molecular Modeling and Durability Studies	Catalysts
		Lunch	12:00 PM				
FC 16	Tues, May 24	1:15 PM	Karen Swider-Lyons	NRL	Garland	Low-Platinum Catalysts for Oxygen Reduction at PEMFC Cathodes	Catalysts
FC 17	Tues, May 24	1:35 PM	Radoslav Adzic	Brookhaven Nat. Lab.	Garland	Low Pt Loading Fuel Cell Electrocatalysts	Catalysts
FC 18	Tues, May 24	2:00 PM	Michel Fouré	Arkema Chemicals	Manheim	Development of a Low-Cost, Durable Membrane and MEA for Stationary and Mobile Fuel Cell Applications	Membranes & MEAs
FC 19	Tues, May 24	2:25 PM	Paolina Atanassova	Superior MicroPowders	Manheim	Development of High-Performance, Low-Pt Cathodes Containing New Catalysts and Layer Structures	Catalysts
FC 20	Tues, May 24	2:45 PM	Stephen Grot	Ion Power, Inc.	Anderson	Platinum Recycling Technology Development	Platinum Recycling
		Break	3:05 PM				
FC 21	Tues, May 24	3:25 PM	Larry Shore	Engelhard	Anderson	Platinum Group Metal Recycling Technology Development	Platinum Recycling
FC 22	Tues, May 24	3:45 PM	David Haack	Porvair Corp.	Ho	Scale-Up of Carbon/Carbon Bipolar Plates	Bipolar Plates
FC 23	Tues, May 24	4:10 PM	Karren More	ORNL	Garland	Cost-Effective Surface Modification for Metallic Bipolar Plates	Bipolar Plates
FC 24	Tues, May 24	4:30 PM	Theodore Krause	ANL	Garland	Water Gas Shift Catalysis	Fuel Processing
FC 25	Tues, May 24	4:50 PM	Theodore Krause	ANL	Garland	Catalysts for Autothermal Reforming	Fuel Processing
		Session Ends	5:10 PM				

FC	26	Wed, May 25	8:30 AM	Viviane Schwartz	ORNL	Garland	Selective Catalytic Oxidation of Hydrogen Sulfide	Fuel Processing
FC	27	Wed, May 25	8:50 AM	Mark K. Gee	Honeywell	Garbak	Cost and Performance Enhancements for a PEM Fuel Cell Turbocompressor	Trans. Sys & BOP
FC	28	Wed, May 25	9:15 AM	Sterling Bailey	Mechanology, LLC	Garbak	Development and Testing of a Toroidal Intersecting Vane Machine (TIVM) Air Management System	Trans. Sys & BOP
FC	29	Wed, May 25	9:40 AM	Giullermo Pont	Honeywell	Ho	Development of a Thermal and Water Management (TWM) System for PEM Fuel Cells	Trans. Sys & BOP
		Break						
			10:05 AM					
FC	30	Wed, May 25	10:20 AM	Brian Knight	UTCFC	Ho	Development of Sensors for Automotive PEM-based Fuel Cells	Trans. Sys & BOP
FC	31	Wed, May 25	10:45 AM	Richard Gehman	Honeywell	Ho	2005 DOE Hydrogen Program Sensor Development	Trans. Sys & BOP
FC	32	Wed, May 25	11:10 AM	Bob Sievers	MTI MicroFuel Cells	Ho	DMFC Prototype Demonstration for Consumer	Auxiliary/Portable Power
FC	33	Wed, May 25	11:35 AM	Brian Wells	Polyfuel, Inc.	Ho	DMFC Power Supply for All-Day True-Wireless Mobile Computing	Auxiliary/Portable Power
		Lunch						
			12:00 PM					
FC	34	Wed, May 25	1:15 PM	Piotr Zelenay	LANL	Garland	Direct Methanol Fuel Cells	Auxiliary/Portable Power
FC	35	Wed, May 25	1:40 PM	Rajesh Ahluwalia	ANL	Garland	Fuel Cell Systems Analysis	Trans. Sys & BOP
FC	36	Wed, May 25	2:05 PM	J. David Carter	ANL	Garland	Bipolar Plate-Supported Solid Oxide Fuel Cell "Tuffcell"	Auxiliary/Portable Power
FC	37	Wed, May 25	2:30 PM	Fernando Garzon	LANL	Garland	Effect of Fuel and Air Impurities on Fuel Cell Performance	Fuel Cell Characterization
		Break						
			2:55 PM					
FC	38	Wed, May 25	3:20 PM	Muhammad Arif	NIST	Garland	Neutron Imaging Study of the Water Transport Mechanism in a Working Fuel Cell	Fuel Cell Characterization
FC	39	Wed, May 25	3:45 PM	Karren More	ORNL	Garland	Microstructural Characterization Of PEM Fuel Cell MEAs	Fuel Cell Characterization
FC	40	Wed, May 25	4:10 PM	Rodney Borup	LANL	Garland	PEM Fuel Cell Durability	Fuel Cell Characterization
FC	41	Wed, May 25	4:35 PM	Yu Seung Kim	LANL	Garland	Sub-Freezing Fuel Cell Effects	Cold Operation
FC	50	Wed, May 25	5:00 PM	John Newman	LBNL	Garland	Investigating Failure in Polymer-Electrolyte Fuel Cells	Fuel Cell Characterization
		Session Ends						
			5:25 PM					
FC	42	Thur, May 26	8:30 AM	Tim McIntyre	ORNL	Garland	Fiber Optic Temperature Sensors for PEM Fuel Cells	Trans. Sys & BOP
FC	43	Thur, May 26	8:55 AM	Erik Simpkins	Idatech	Garbak	Research and Development for Off-road Fuel Cell Applications	Auxiliary/Portable Power
FC	44	Thur, May 26	9:20 AM	Jim Stevens	ChevronTexaco	Epping	50 kW Absorption Enhanced Natural Gas Reformer	Fuel Processing
FC	45	Thur, May 26	9:45 AM	Tom Holmes	Nuvera	Epping	Cost-effective High-efficiency Advanced Reforming	Fuel Processing
		Break						
			10:10 AM					
FC	46	Thur, May 26	10:25 AM	Tom Clark	UTC	Epping	150 kW PEM Fuel Cell Power Plant Verification	Stationary Power Systems
FC	47	Thur, May 26	10:50 AM	John Vogel	Plug Power	Epping	Back-up/Peak-Shaving Fuel Cells	Stationary Power Systems
FC	48	Thur, May 26	11:15 AM	Harry J. Stone	Battelle	Epping	Economic Analysis of Stationary PEM Fuel Cell	Stationary Power Systems
FC	49	Thur, May 26	11:35 AM	Kyle Taylor	IdaTech	Epping	Advanced Buildings PEM Fuel Cell System	Stationary Power Systems
		Session Ends						
			12:00 PM					

Fuel Cell Poster Presentations

Monday Afternoon (Outside Salons II and III)

Schedule as of: **Monday, May 16, 2005**

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Presenter</u>	<u>Organization</u>	<u>DOE TDM</u>	<u>Title</u>	<u>Sub-Program Category</u>
FCP 9	Mon, May 23	1:45-5:00	Keith Kepler	Farasis Energy	Ho	Novel, Combinatorial Method for Developing Cathode Catalysts for Fuel Cells	Catalysts
FCP 10	Mon, May 23	1:45-5:00	Junhua Jiang	NuVant Systems	Ho	Improved Fuel Cell Cathode Catalysts Using Combinatorial Methods	Catalysts
FCP 11	Mon, May 23	1:45-5:00	Mo Khaleel	PNNL	Garbak	Modeling and Control of an SOFC APU	Auxiliary/Portable Power
FCP 12	Mon, May 23	1:45-5:00	John Turner	NREL	Garland	Corrosion Protection of Metallic Bipolar Plates for Fuel Cells	Bipolar Plates
FCP 13	Mon, May 23	1:45-5:00	Scott Weil	PNNL	Garland	Development of Low-Cost, Clad Metal Bipolar Plates for PEM Fuel Cells	Bipolar Plates

Tuesday Morning (Outside Salons II, III, IV, and V)

Schedule as of: **Monday, May 16, 2005**

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Presenter</u>	<u>Organization</u>	<u>DOE TDM</u>	<u>Title</u>	<u>Sub-Program Category</u>
FCP 3	Tues, May 24	9:00-12:00	John Turner	NREL	Garland	Advanced Fuel Cell Membranes Based on Heteropolyacids	Membranes & MEAs
FCP 14	Tues, May 24	9:00-12:00	Levi Thompson	U of Michigan	Epping	Fuel Processors for PEM Fuel Cells	Fuel Processing
FCP 15	Tues, May 24	9:00-12:00	David Yee	Catalytica	Ho	Plate-Based Fuel Processing System	Fuel Processing
FCP 16	Tues, May 24	9:00-12:00	Ken Kelly	NREL	Epping	Application of Advanced CAE Methods for Quality and Durability of Fuel Cell Components	Stationary Power Systems
FCP 17	Tues, May 24	9:00-12:00	Mark Schneider	Del. Co.Electric Co-op	Epping	Residential Fuel Cell Demonstration by the Delaware County Electric Cooperative, Inc.	Stationary Power Systems
FCP 18	Tues, May 24	9:00-12:00	Mohammad Alam	U of S. Alabama	Epping	Smart Fuel Cell Operated Residential Micro Micro-Grid Community Grid Community	Stationary Power Systems
FCP 19	Tues, May 24	9:00-12:00	Ahmad Pesaran	NREL	Garland	Fuel Cells Vehicle Systems Analysis (Fuel Cell Freeze Investigation)	Trans. Sys & BOP
FCP 20	Tues, May 24	9:00-12:00	Edgar Lara-Curzio	ORNL	Garland	Graphite-based Components for Thermal Management in Fuel Cell Systems	Trans. Sys & BOP
FCP 21	Tues, May 24	9:00-12:00	Satish Mohapatra	Advanced Fluids Tech.	Ho	Complex Coolant Fluid for PEM Fuel Cell Systems	Trans. Sys & BOP
FCP 22	Tues, May 24	9:00-12:00	S. Narayanan	JPL	Garland	Advanced Catalysts for Fuel Cells	Auxiliary/Portable Power
FCP 25	Tues, May 24	9:00-12:00	Shabbir Ahmed	ANL	Garland	Fuel Processor R&D	Fuel Processing
FCP 26	Tues, May 24	9:00-12:00	Greg Whyatt	PNNL	Garland	Fore Court Fuel Processing	Fuel Processing
FCP 27	Tues, May 24	9:00-12:00	Tommy Rockward	LANL	Garland	Component Benchmarking	Fuel Cell Characterization
FCP 28	Tues, May 24	9:00-12:00	Bryan Pivovar	LANL		Fundamental Science for Performance, Cost and Durability	Fuel Cell Characterization
FCP 29	Tues, May 24	9:00-12:00	Ira Bloom	ANL		Fuel Cell Testing	Fuel Cell Characterization

Tuesday Afternoon (Outside Salons II, III, IV, and V)

Schedule as of: **Monday, May 16, 2005**

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Presenter</u>	<u>Organization</u>	<u>DOE TDM</u>	<u>Title</u>	<u>Sub-Program Category</u>
FCP 1	Tues, May 24	1:30-5:00	Lee Spangler	Montana State Univ.	Manheim	Montana PEM Membrane Degradation Study	Membranes & MEAs
FCP 2	Tues, May 24	1:30-5:00	Tony DeCarmine	Oxford Perf. Matls.	Manheim	Development of Higher Temperature Membrane and Electrode Assembly for Proton Exchange Membrane Non-Nafion Membrane Electrode Assemblies	Membranes & MEAs
FCP 4	Tues, May 24	1:30-5:00	Bryan Pivovar	LANL	Garland	Hydrocarbon Membrane	Membranes & MEAs
FCP 5	Tues, May 24	1:30-5:00	Christopher Cornelius	SNL	Garland	Low Cost, High Performance PPSA-based PEM Fuel Cell Membranes	Membranes & MEAs
FCP 6	Tues, May 24	1:30-5:00	Junqing Ma	T/J Technologies	Manheim	Cathode Electrocatalysis:Platinum Stability and Non-Platinum Catalysts	Catalysts
FCP 8	Tues, May 24	1:30-5:00	Debbie Myers	ANL	Garland	Solid Oxide Fuel Cell Development for Auxiliary Power in Heavy Duty Vehicle Applications	Auxiliary/Portable Power
FCP 30	Tues, May 24	1:30-5:00	George Simopoulos	Delphi	Garbak	Diesel Fueled SOFC for Class 7/Class 8 On-Highway Truck Auxiliary Power	Auxiliary/Portable Power
FCP 31	Tues, May 24	1:30-5:00	Dan Norrick	Delphi	Garbak	Fuel Cell APU	Auxiliary/Portable Power
FCP 32	Tues, May 24 Tues, May 24	1:30-5:00 1:45-5:00	Christie-Joy Brodrick Adriano Duarte Filho	UC Davis Brazilian Ministry of Science and	Garbak	Brazilian Fuel Cell Program (ProCaC)	International Activities

2005 DOE HYDROGEN PROGRAM REVIEW

Storage Oral Presentations - Session B (Salons B and C)

Schedule as of: Tuesday, May 17, 2005

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Presenter</u>	<u>Organization</u>	<u>DOE TDM</u>	<u>Title</u>	<u>Sub-Program Category</u>
ST 1	Mon, May 23	1:45 PM	Sunita Satyapal	DOE/EERE		Hydrogen Storage	NA
ST 2	Mon, May 23	2:25 PM	George Thomas	DOE/BES			
			Jim Wang	Sandia Nat. Labs	Read		Metal Hydrides
						Development of Metal Hydrides at Sandia National Laboratories	
		Session Ends	3:55 PM				
ST 3	Tues, May 24	8:30 AM	Craig Jensen	Univ. of Hawaii	Read	Catalytically Enhanced Hydrogen Storage Systems	Metal Hydrides
ST 4	Tues, May 24	8:55 AM	Don Anton	UTRC	Read	High Density Hydrogen Storage System Demonstration Using NaAlH ₄ Complex Compound Hydrides	Metal Hydrides
ST 5	Tues, May 24	9:20 AM	Adriaan Sachtler	UOP	Read	Discovery of Novel Complex Metal Hydrides for Hydrogen Storage through Molecular Modeling and Combinatorial Methods	Metal Hydrides
ST 6	Tues, May 24	9:45 AM	Susanne Opalka	UTRC	Read	Complex Hydride Compounds with Enhanced Hydrogen Storage Capacity	Metal Hydrides
		Break	10:10 AM				
ST 7	Tues, May 24	10:25 AM	Orhan Talu	Cleveland State Un.	Read	Sub-Nanostructured Non-Transition Metal Complex Grids for Hydrogen Storage	New Mat'l's & Concepts
ST 8	Tues, May 24	10:50 AM	Samuel Mao	U of California	Read	A Synergistic Approach to the Development of New Hydrogen Storage Materials	New Mat'l's & Concepts
ST 9	Tues, May 24	11:15 AM	Ralph White	U. of S. Carolina	Read	Clean Energy Research at the University of South Carolina	New Mat'l's & Concepts
ST 10	Tues, May 24	11:40 AM	Lee Stefanakos	U. of South Fl.	Read	Fuel Cell and Hydrogen Research University of South Florida	New Mat'l's & Concepts
		Lunch	12:00 PM				
ST 11	Tues, May 24	1:15 PM	Bill Tumas	LANL	Satyapal	Center of Excellence for Chemical Hydrogen Storage	Chemical Hydrides
ST 12	Tues, May 24	2:15 PM	Ying Wu	Millennium Cell	Satyapal	Process for the Regeneration of Sodium Borate to Sodium Borohydride for Use as a Hydrogen Storage Source	Chemical Hydrides
ST 13	Tues, May 24	2:40 PM	Andy McClaine	Safe Hydrogen	Satyapal	Chemical Hydride Slurry for Hydrogen Production and Storage	Chemical Hydrides
		Break	3:05 PM				
ST 14	Tues, May 24	3:25 PM	Alan Cooper	Air Products	Satyapal	Development of New Carbon-Based Sorbent Systems for an Effective Containment of Hydrogen	Chemical Hydrides
ST 15	Tues, May 24	3:50 PM	Jui Ko	Quantum	Satyapal	Low Cost, High Efficiency, High Pressure Hydrogen Storage	Compressed/Liquid Tanks
ST 16	Tues, May 24	4:15 PM	Salvador Aceves	LLNL	Satyapal	Advanced Concepts for Containment of Hydrogen and Hydrogen Storage Materials	Compressed/Liquid Tanks
ST 17	Tues, May 24	4:40 PM	Chuck Ryan	Natl Center for Manf.Sci.	Milliken	Advanced Manufacturing Technologies for Renewable Energy Applications	New Mat'l's & Concepts
		Session Ends	5:05 PM				
ST 18	Wed, May 25	8:00 AM	Mike Heben	NREL	Satyapal	DOE Carbon-based Materials Center of Excellence: NREL Activities and Overview	Carbon Materials
ST 19	Wed, May 25	9:30 AM	Stephen Lasher	TIAX LLC	Satyapal	Analyses of Hydrogen Storage Materials and On-Board Systems	Testing & Analysis
		Break	9:55 AM				
ST 20	Wed, May 25	10:15 AM	Rajesh Ahluwalia	ANL	Satyapal	System Level Analysis of Hydrogen Storage Options	Testing & Analysis
ST 21	Wed, May 25	10:40 AM	Richard Page	SwRI	Satyapal	Standardized Testing Program for Chemical Hydride and Carbon Storage Technologies	Testing & Analysis

Storage Poster Presentations

Monday Afternoon 4-7 - Metal Hydride Center of Excellence Projects (Salon K)

Schedule as of: Tuesday, May 17, 2005

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Presenter</u>	<u>Organization</u>	<u>DOE TDM</u>	<u>Title</u>	<u>Sub-Program Category</u>
STP 15	Mon, May 23	4-7 PM	Jim Wang	Sandia Nat. Labs	Read	Overview of DOE Metal Hydride Center of Excellence (MHCoeE)	Metal Hydrides
STP 62	Mon, May 23	4-7 PM	Jim Wang	Sandia Nat. Labs	Read	Overview of SNL Activities	Metal Hydrides
STP 16	Mon, May 23	4-7 PM	Jim Wegrzyn	Brookhaven NL	Read	Synthesis and Properties of Aluminum Hydride as a Hydrogen Storage Material	Metal Hydrides
STP 17	Mon, May 23	4-7 PM	Robert Bowman	Jet Propulsion Lab	Read	Development and Evaluation of Advanced Hydride Systems for Reversible Hydrogen Storage	Metal Hydrides
STP 18	Mon, May 23	4-7 PM	Terry Udovic	NIST	Read	Neutron Scattering Characterization and Thermodynamic Modeling of Advanced Metal Hydrides for Reversible Hydrogen Storage	Metal Hydrides
STP 19	Mon, May 23	4-7 PM	Gilbert Brown	ORNL	Read	Novel Synthetic Approaches for the Preparation of Complex Hydrides for Hydrogen Storage	Metal Hydrides
STP 20	Mon, May 23	4-7 PM	Ragaiy Zidan	Savannah River NL	Read	Development of Reversible Hydrogen Storage Alane	Metal Hydrides
STP 21	Mon, May 23	4-7 PM	Channing Ahn	Cal. Inst. of Tech.	Read	Synthesis of Nanophase Materials for Thermodynamically Tuned Reversible Hydrogen Storage	Metal Hydrides
STP 22	Mon, May 23	4-7 PM	Bruce Clemens	Stanford Univ.	Read	Thermodynamically Tuned Nanophase Materials for Reversible Hydrogen Storage: Structure and Kinetics of Nanoparticle and Model System Materials	Metal Hydrides
STP 23	Mon, May 23	4-7 PM	Ian Robertson	U of Ill. – U-C	Read	Reversible Hydrogen Storage Materials – Structure, Chemistry and Electronic Structure	Metal Hydrides
STP 24	Mon, May 23	4-7 PM	Dhanesh Chandra	U of Nev. - Reno	Read	Effect of Gaseous Impurities on Long-Term Thermal Cycling and Aging Properties of Complex Hydrides for Hydrogen	Metal Hydrides
STP 25	Mon, May 23	4-7 PM	Karl Johnson/ David Sholl	Univ. of Pittsburgh & Carnegie Mellon	Read	First-Principles Modeling of Hydrogen Storage in Metal Hydride Systems	Metal Hydrides
STP 26	Mon, May 23	4-7 PM	Zak Fang	University of Utah	Read	Synthesis and Discovery of Nanocrystalline Reversible Hydrides by Vapor Phase Reactions	Metal Hydrides
STP 27	Mon, May 23	4-7 PM	J.-C. Zhao	GE	Read	Lightweight Intermetallics for Hydrogen Storage	Metal Hydrides
STP 28	Mon, May 23	4-7 PM	Greg Olson	Hughes Research Labs	Read	Thermodynamically Tuned Nanophase Materials	Metal Hydrides
STP 29	Mon, May 23	4-7 PM	Xiao-Dong Xiang	Intematix Corp.	Read	High Throughput Combinatorial Chemistry Development of Complex Metal Hydrides	Metal Hydrides
STP 59	Mon, May 23	4-7 PM	Craig Jensen	Univ. of Hawaii	Read	Fundamental Studies of Advanced High-Capacity, Reversible Metal Hydrides	Metal Hydrides

Monday Afternoon 4-7 - Chemical Hydrogen Center of Excellence Projects (Salon K)Schedule as of: **Tuesday, May 17, 2005**

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Presenter</u>	<u>Organization</u>	<u>DOE TDM</u>	<u>Title</u>	<u>Sub-Program Category</u>
STP 60	Mon, May 23	4-7	Bill Tumas	LANL	Ordaz	Chemical Hydrogen Storage Center of Excellence	Chemical Hydrides
STP 61	Mon, May 23	4-7	Bill Tumas	LANL	Ordaz	Overview of LANL Activities	Chemical Hydrides
STP 3	Mon, May 23	4-7 PM	Chris Aardahl	PNNL	Ordaz	Center of Excellence for Chemical Hydrogen Storage: PNNL Tasks and Collaborations	Chemical Hydrides
STP 4	Mon, May 23	4-7 PM	Digby MacDonald	Penn State Univ.	Ordaz	Electrochemical Hydrogen Storage Systems	Chemical Hydrides
STP 5	Mon, May 23	4-7 PM	Anthony Arduengo	U of Alabama	Ordaz	Main Group Element Chemistry for Hydrogen Storage and Activation	Chemical Hydrides
STP 6	Mon, May 23	4-7 PM	Philip Power	U of Cal. - Davis	Ordaz	Chemical Hydrogen Storage Using Ultra-High Surface Area Main Group Elements	Chemical Hydrides
STP 7	Mon, May 23	4-7 PM	Fred Hawthorne	U of Cal. - Los Angeles	Ordaz	Chemical Hydrogen Storage Using Polyhedral Borane Anion Salts	Chemical Hydrides
STP 8	Mon, May 23	4-7 PM	Larry Sneddon	U of Pennsylvania	Ordaz	Amineborane Hydrogen Storage	Chemical Hydrides
STP 9	Mon, May 23	4-7 PM	Mike Heinekey	U of Washington	Ordaz	Kinetic and Mechanistic Studies of B-N	Chemical Hydrides
STP 10	Mon, May 23	4-7 PM	Ying Wu	Millennium Cell	Ordaz	Development of Advanced Chemical Hydrogen Storage and Generation System	Chemical Hydrides
STP 11	Mon, May 23	4-7 PM	Susan Linehan	Rohm and Haas	Ordaz	Novel Approaches to Hydrogen Storage: Conversion of Borates to Boron Hydrides	Chemical Hydrides
STP 14	Mon, May 23	4-7 PM	Clinton Lane	N. Arizona Univ	Ordaz	Safety Analysis and Applied Research on the Use of Borane-Amines for Hydrogen Storage	Chemical Hydrides
STP 12	Mon, May 23	4-7 PM	Xiao-Dong Xiang	Intematix Corp.	Ordaz	Combinatorial Synthesis and High Throughput Screening of Effective Catalysts for Chemical Hydrides	Chemical Hydrides

Monday Afternoon 4-7 - Carbon Center of Excellence Projects (Salon K)Schedule as of: **Tuesday, May 17, 2005**

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Presenter</u>	<u>Organization</u>	<u>DOE TDM</u>	<u>Title</u>	<u>Sub-Program Category</u>
STP 30	Mon, May 23	4-7 PM	Mike Heben	NREL	Satyapal	Overview of DOE Carbon-based Materials Center of Excellence	Carbon Materials
STP 63	Mon, May 23	4-7 PM	Mike Heben	NREL	Satyapal	Overview of NREL Activities	Carbon Materials
STP 31	Mon, May 23	4-7 PM	Joe Satcher	LLNL	Satyapal	Metal-doped Carbon Aerogels for Hydrogen Storage	Carbon Materials
STP 32	Mon, May 23	4-7 PM	David Geohegan	ORNL	Satyapal	Synthesis and Processing of Single-Walled Carbon Nanohorns for Hydrogen Storage and Catalyst Supports	Carbon Materials
STP 33	Mon, May 23	4-7 PM	Dan Neumann	NIST	Satyapal	Neutron Characterization of Carbon-Based Materials	Carbon Materials
STP 34	Mon, May 23	4-7 PM	Channing Ahn	Cal. Inst. of Tech.	Satyapal	Enhanced Hydrogen Dipole Physisorption	Carbon Materials
STP 35	Mon, May 23	4-7 PM	Jie Lui	Duke University	Satyapal	Controlling the Diameter of Single Walled Carbon Nanotubes for Hydrogen Storage	Carbon Materials
STP 36	Mon, May 23	4-7 PM	Peter Eklund	Penn State Univ.	Satyapal	Study of Hydrogen Storage in Advanced Boron and Metal Loaded High Porosity Carbons	Carbon Materials
STP 37	Mon, May 23	4-7 PM	Richard Smalley	Rice University	Satyapal	Cloning Single Wall Carbon Nanotubes for Hydrogen Storage	Carbon Materials
STP 38	Mon, May 23	4-7 PM	Boris Yakobson	Rice University	Satyapal	Optimization of SWNT Production and Theoretical Models of H2-SWNT Systems for Hydrogen Storage	Carbon Materials
STP 39	Mon, May 23	4-7 PM	Omar Yaghi	U of Michigan	Satyapal	Examination of the Physical Aspects of Hydrogen Storage in MOFs	Carbon Materials
STP 40	Mon, May 23	4-7 PM	Ralph Yang	U of Michigan	Satyapal	Hydrogen Storage in Graphite Nanofibers and the Spillover Mechanism	Carbon Materials
STP 41	Mon, May 23	4-7 PM	Yue Wu	U of N. Carolina	Satyapal	Characterization of Hydrogen Adsorption by NMR	Carbon Materials
STP 42	Mon, May 23	4-7 PM	Alan MacDiarmid	U of Pennsylvania	Satyapal	Conducting Polymers as New Materials for Hydrogen Storage	Carbon Materials
STP 43	Mon, May 23	4-7 PM	Guido Pez	Air Products	Satyapal	Designing Microporous Carbons for Hydrogen Storage Systems	Carbon Materials

Tuesday Evening - O'Bryne Gallery at the Daughters of the American Revolution
Schedule as of: Tuesday, May 17, 2005

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Presenter</u>	<u>Organization</u>	<u>DOE TDM</u>	<u>Title</u>	<u>Sub-Program Category</u>
STP 15	Tues, May 24	6:30-8:30	Jim Wang	Sandia Nat. Labs	Read	Overview of DOE Metal Hydride Center of Excellence (MHCoe)	Metal Hydrides
STP 62	Tues, May 24	6:30-8:30	Jim Wang	Sandia Nat. Labs	Read	Development of Metal Hydrides at Sandia National Laboratories	Metal Hydrides
STP 30	Tues, May 24	6:30-8:30	Mike Heben	NREL	Satyapal	Overview of DOE Carbon-based Materials Center of Excellence	Carbon Materials
STP 63	Tues, May 24	6:30-8:30	Mike Heben	NREL	Satyapal	NREL Activities in DOE Carbon-based Materials Center of Excellence	Carbon Materials
STP 60	Tues, May 24	6:30-8:30	Bill Tumas	LANL	Ordaz	Center of Excellence for Chemical Hydrogen Storage: LANL	Chemical Hydrides
STP 61	Tues, May 24	6:30-8:30	Bill Tumas	LANL	Ordaz	Center of Excellence for Chemical Hydrogen Storage: LANL	Chemical Hydrides
<u>Note: The following posters will be attended from 6:30 to 7:30 PM</u>							
STP 28	Tues, May 24	6:30-7:30	Greg Olson	Hughes Research Labs	Read	Thermodynamically Tuned Nanophase Materials	Metal Hydrides
STP 18	Tues, May 24	6:30-7:30	Terry Udovic	NIST	Read	Neutron Scattering Characterization and Thermodynamic Modeling of Advanced Metal Hydrides for Reversible Hydrogen Storage	Metal Hydrides
STP 27	Tues, May 24	6:30-7:30	J.-C. Zhao	GE	Read	Lightweight Intermetallics for Hydrogen Storage	Metal Hydrides
STP 37	Tues, May 24	6:30-7:30	Richard Smalley	Rice University	Satyapal	Cloning Single Wall Carbon Nanotubes for Hydrogen Storage	Carbon Materials
STP 43	Tues, May 24	6:30-7:30	Guido Pez	Air Products	Satyapal	Designing Microporous Carbons for Hydrogen Storage Systems	Carbon Materials
STP 31	Tues, May 24	6:30-7:30	Joe Satcher	LLNL	Satyapal	Metal-doped Carbon Aerogels for Hydrogen Storage	Carbon Materials
STP 8	Tues, May 24	6:30-7:30	Larry Sneddon	U of Pennsylvania	Ordaz	Amineborane Hydrogen Storage	Chemical Hydrides
STP 4	Tues, May 24	6:30-7:30	Digby MacDonald	Penn State Univ.	Ordaz	Electrochemical Hydrogen Storage Systems	Chemical Hydrides
<u>Note: The following posters will be attended from 7:30 to 8:30 PM</u>							
STP 22	Tues, May 24	7:30-8:30	Bruce Clemens	Stanford Univ.	Read	Thermodynamically Tuned Nanophase Materials for Reversible Hydrogen Storage: Structure and Kinetics of Nanoparticle and Model System Materials	Metal Hydrides
STP 59	Tues, May 24	7:30-8:30	Craig Jensen	Univ. of Hawaii	Read	Fundamental Studies of Advanced High-Capacity, Reversible Metal Hydrides	Metal Hydrides
STP 29	Tues, May 24	7:30-8:30	Xiao-Dong Xiang	Intematix Corp.	Read	High Throughput Combinatorial Chemistry Development of Complex Metal Hydrides	Metal Hydrides
STP 38	Tues, May 24	7:30-8:30	Boris Yakobson	Rice University	Satyapal	Optimization of SWNT Production and Theoretical Models of H2-SWNT Systems for Hydrogen Storage	Carbon Materials
STP 42	Tues, May 24	7:30-8:30	Alan MacDiarmid	U of Pennsylvania	Satyapal	Conducting Polymers as New Materials for Hydrogen Storage	Carbon Materials
STP 32	Tues, May 24	7:30-8:30	David Geohegan	ORNL	Satyapal	Synthesis and Processing of Single-Walled Carbon Nanohorns for Hydrogen Storage and Catalyst Supports	Carbon Materials
STP 3	Tues, May 24	7:30-8:30	Chris Aardahl	PNNL	Ordaz	Center of Excellence for Chemical Hydrogen Storage: PNNL Tasks and Collaborations	Chemical Hydrides
STP 14	Tues, May 24	7:30-8:30	Clinton Lane	N. Arizona Univ	Ordaz	Safety Analysis and Applied Research on the Use of Borane-Amines for Hydrogen Storage	Chemical Hydrides
STP 5	Tues, May 24	7:30-8:30	Anthony Arduengo	U of Alabama	Ordaz	Main Group Element Chemistry for Hydrogen Storage and Activation	Chemical Hydrides

Tuesday Evening - Banquet Hall at the Daughters of the American RevolutionSchedule as of: **Tuesday, May 17, 2005**

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Presenter</u>	<u>Organization</u>	<u>DOE TDM</u>	<u>Title</u>	<u>Sub-Program Category</u>
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Note: The following posters will be attended from 6:30 to 7:30 PM

STP 35	Tues, May 24	6:30-7:30	Jie Lui	Duke University	Satyapal	Controlling the Diameter of Single Walled Carbon Nanotubes for Hydrogen Storage	Carbon Materials
STP 41	Tues, May 24	6:30-7:30	Yue Wu	U of N. Carolina	Satyapal	Characterization of Hydrogen Adsorption by NMR	Carbon Materials
STP 33	Tues, May 24	6:30-7:30	Dan Neumann	NIST	Satyapal	Neutron Characterization of Carbon-Based Materials	Carbon Materials
STP 21	Tues, May 24	6:30-7:30	Channing Ahn	Cal. Inst. of Tech.	Read	Synthesis of Nanophase Materials for Thermodynamically Tuned Reversible Hydrogen Storage	Metal Hydrides
STP 16	Tues, May 24	6:30-7:30	Jim Wegrzyn	Brookhaven NL	Read	Synthesis and Properties of Aluminum Hydride as a Hydrogen Storage Material	Metal Hydrides
STP 24	Tues, May 24	6:30-7:30	Dhanesh Chandra	U of Nev. - Reno	Read	Effect of Gaseous Impurities on Long-Term Thermal Cycling and Aging Properties of Complex Hydrides for Hydrogen Storage	Metal Hydrides

Note: The following posters will be attended from 7:30 to 8:30 PM

STP 36	Tues, May 24	7:30-8:30	Peter Eklund	Penn State Univ.	Satyapal	Study of Hydrogen Storage in Advanced Boron and Metal Loaded High Porosity Carbons	Carbon Materials
STP 40	Tues, May 24	7:30-8:30	Ralph Yang	U of Michigan	Satyapal	Hydrogen Storage in Graphite Nanofibers and the Spillover Mechanism	Carbon Materials
STP 34	Tues, May 24	7:30-8:30	Channing Ahn	Cal. Inst. of Tech.	Satyapal	Enhanced Hydrogen Dipole Physisorption	Carbon Materials
STP 17	Tues, May 24	7:30-8:30	Robert Bowman	Jet Propulsion Lab	Read	Development and Evaluation of Advanced Hydride Systems for Reversible Hydrogen Storage	Metal Hydrides
STP 20	Tues, May 24	7:30-8:30	Ragaiy Zidan	Savannah River NL	Read	Development of Reversible Hydrogen Storage Alane	Metal Hydrides
STP 26	Tues, May 24	7:30-8:30	Zak Fang	University of Utah	Read	Synthesis and Discovery of Nanocrystalline Reversible Hydrides by Vapor Phase Reactions	Metal Hydrides

Tuesday Evening - Library and the Pennsylvania Foyer at the Daughters of the American RevolutionSchedule as of: **Tuesday, May 17, 2005**

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Presenter</u>	<u>Organization</u>	<u>DOE TDM</u>	<u>Title</u>	<u>Sub-Program Category</u>
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Note: The following posters will be attended from 6:30 to 7:30 PM

STP 39	Tues, May 24	6:30-7:30	Omar Yaghi	U of Michigan	Satyapal	Examination of the Physical Aspects of Hydrogen Storage in MOFs	Carbon Materials
STP 12	Tues, May 24	6:30-7:30	Xiao-Dong Xiang	Intematix Corp.	Ordaz	Combinatorial Synthesis and High Throughput Screening of Effective Catalysts for Chemical Hydrides	Chemical Hydrides
STP 10	Tues, May 24	6:30-7:30	Ying Wu	Millennium Cell	Ordaz	Development of Advanced Chemical Hydrogen Storage and Generation System	Chemical Hydrides
STP 6	Tues, May 24	6:30-7:30	Philip Power	U of Cal. - Davis	Ordaz	Chemical Hydrogen Storage Using Ultra-High Surface Area Main Group Elements	Chemical Hydrides
STP 23	Tues, May 24	6:30-7:30	Ian Robertson	U of Ill. - U-C	Read	Reversible Hydrogen Storage Materials - Structure, Chemistry and Electronic Structure	Metal Hydrides

Note: The following posters will be attended from 7:30 to 8:30 PM

STP 19	Tues, May 24	7:30-8:30	Gilbert Brown	ORNL	Read	Novel Synthetic Approaches for the Preparation of Complex Hydrides for Hydrogen Storage	Metal Hydrides
STP 7	Tues, May 24	7:30-8:30	Fred Hawthorne	U of Cal. - Los Angeles	Ordaz	Chemical Hydrogen Storage Using Polyhedral Borane Anion Salts	Chemical Hydrides
STP 11	Tues, May 24	7:30-8:30	Susan Linehan	Rohm and Haas	Ordaz	Novel Approaches to Hydrogen Storage: Conversion of Borates to Boron Hydrides	Chemical Hydrides
STP 9	Tues, May 24	7:30-8:30	Mike Heinekey	U of Washington	Ordaz	Kinetic and Mechanistic Studies of B-N	Chemical Hydrides
STP 25	Tues, May 24	7:30-8:30	Karl Johnson	U of Pittsburgh	Read	First-Principles Modeling of Hydrogen Storage in Metal Hydride	Metal Hydrides

Wednesday Morning 9-1 - New Materials and Concepts (Salon K)Schedule as of: **Tuesday, May 17, 2005**

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Presenter</u>	<u>Organization</u>	<u>DOE TDM</u>	<u>Title</u>	<u>Sub-Program Category</u>
STP 1	Wed, May 25	9:00-1:00	Andrew Weisberg	LLNL	Satyapal	Next Generation Hydrogen Storage Containers	New Mat'l's & Concepts
STP 2	Wed, May 25	9:00-1:00	Lee Stefanakos	U. of South Fl.	Satyapal	Fuel Cell and Hydrogen Research	New Mat'l's & Concepts
STP 13	Wed, May 25	9:00-1:00	Ashok Damle	Research Triangle Inst.	Satyapal	Development of Regenerable, High-Capacity Boron Nitrogen Hydrides for Hydrogen Storage	New Mat'l's & Concepts
STP 44	Wed, May 25	9:00-1:00	Yury Gogotsi	U of Pennsylvania	Read	Carbide-Derived Carbons with Tunable Porosity Optimized for Hydrogen Storage	Carbon Materials
STP 45	Wed, May 25	9:00-1:00	Chinbay Fan	GTI	Read	Electron-Charged Graphite-Based Hydrogen Storage Material	Carbon Materials
STP 46	Wed, May 25	9:00-1:00	Israel Cabasso	SUNY - Syracuse	Read	Nanostructured Activated Carbon for Hydrogen Storage	Carbon Materials
STP 47	Wed, May 25	9:00-1:00	Matt Hall	Alfred University	Read	Glass Microspheres for Hydrogen Storage	New Mat'l's & Concepts
STP 48	Wed, May 25	9:00-1:00	Viktor Struzhkin	Carnegie Institute	Read	Inorganic Clathrates for Hydrogen Storage	New Mat'l's & Concepts
STP 49	Wed, May 25	9:00-1:00	Jim Hwang	Mich.Tech. Univ.	Read	Metal Perhydrides for Hydrogen Storage	New Mat'l's & Concepts
STP 50	Wed, May 25	9:00-1:00	Juergen Eckert	U of C – Santa Barbara	Read	Hydrogen Storage Materials with Binding Intermediate Between Chemisorption and Physisorption	New Mat'l's & Concepts
STP 51	Wed, May 25	9:00-1:00	Leon Shaw	U of Connecticut	Read	Lithium Nitride-Based Materials for Hydrogen Storage	New Mat'l's & Concepts
STP 52	Wed, May 25	9:00-1:00	Omar Yaghi	U of Michigan	Read	New Concepts for Optimized Hydrogen Storage in MOFs	New Mat'l's & Concepts
STP 53	Wed, May 25	9:00-1:00	Jerry Atwood	U of Missouri - St. Louis	Read	Hydrogen Storage in Novel Organic Clathrates	New Mat'l's & Concepts
STP 55	Wed, May 25	9:00-1:00	Jim Ritter	U of S. Carolina	Read	Development of Complex Metal Hydride Hydrogen Storage Materials	New Mat'l's & Concepts
STP 56	Wed, May 25	9:00-1:00	Michael Matthews	U of S. Carolina	Read	Clean Energy Research Project III: Hydrogen Storage Using Chemical Hydrides	Metal Hydrides
STP 57	Wed, May 25	9:00-1:00	Mark Richards	GTI	Read	Underground LH2 Off-Board Hydrogen Storage Technology	Compressed/Liquid Tanks
STP 58	Wed, May 25	9:00-1:00	Ragaiy Zidan	Savannah River NL	Read	Development and Characterization of Novel Complex Hydrides	Metal Hydrides

2005 DOE HYDROGEN PROGRAM REVIEW

Technology Validation Oral Presentations - Session B (Salons B and C)

Schedule as of: Monday, May 16, 2005

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Presenter</u>	<u>Organization</u>	<u>DOE TDM</u>	<u>Title</u>	<u>Sub-Program Category</u>	
TV 1	Wed, May 25	11:05 AM	Sig Gronich	DOE		Technology Validation Sub-Program	NA	
TV 2	Wed, May 25	11:35 AM	Rob Regan	DTE Energy	Gronich	DTE Energy Hydrogen Technology Park	Power Parks Analysis	
		Lunch						
		12:00 PM						
TV 3	Wed, May 25	1:15 PM	Richard Rocheleau	Hawaii Natural Energy Inst.	Gronich	Hawaii Hydrogen Center for Development and Deployment of Distributed Energy Systems	Power Parks Analysis	
TV 4	Wed, May 25	1:35 PM	Raymond Hobbs	Pinnacle	Gronich	Hydrogen Power Park - Business Opportunities Concept Project	Power Parks Analysis	
TV 5	Wed, May 25	1:55 PM	Greg Keenan	Air Products	Gronich	Validation of an Integrated System for a Hydrogen-Fueled Power Park	Power Parks Analysis	
TV 6	Wed, May 25	2:25 PM	Todd Carlson	Air Products	Gronich	Novel Compression and Fueling Apparatus to Meet Hydrogen Vehicle Range Requirements	Refueling Tech. Dev. & Demo.	
TV 7	Wed, May 25	2:50 PM	Keith Wipke	NREL	Gronich	Controlled Hydrogen Fleet & Infrastructure Analysis	Systems Analysis	
		Break						
		3:15 PM						
TV 8	Wed, May 25	3:35 PM	Mark Pedersen	Air Products	Gronich	California Hydrogen Infrastructure Project	Vehicle Demonstrations	
TV 9	Wed, May 25	3:55 PM	Klaus BonHoff	DaimlerChrysler	Gronich	Controlled Hydrogen Fleet and Infrastructure Demonstration and Validation Project	Vehicle Demonstrations	
TV 10	Wed, May 25	4:15 PM	Greg Frenette	Ford	Gronich	Hydrogen Fuel Cell Vehicle & Infrastructure Demonstration Program Review	Vehicle Demonstrations	
TV 11	Wed, May 25	4:35 PM	Rajesh Paulose	Chevron Texaco	Gronich	Controlled Hydrogen Fleet and Infrastructure Demonstration and Validation Project	Vehicle Demonstrations	
TV 12	Wed, May 25	4:55 PM	Roz Sell	General Motors	Gronich	Hydrogen Vehicle and Infrastructure Demonstration and Validation	Vehicle Demonstrations	
		Session Ends						
		5:15 PM						

Technology Validation Poster Presentations

Wednesday Morning (Outside Salons B and C)

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Presenter</u>	<u>Organization</u>	<u>DOE TDM</u>	<u>Title</u>	<u>Sub-Program Category</u>
TVP 1	Wed, May 25	9:00-12:00	Kofi Bota	Clark Atlanta Univ.	Gronich	Hydrogen from Biomass for Urban Transportation	Power Parks Analysis
TVP 2	Wed, May 25	9:00-12:00	Joe Ferguson	City of Chattanooga	Gronich	Chattanooga Fuel Cell Demonstration Project	Power Parks Analysis
TVP 5	Wed, May 25	9:00-12:00	Leslie Eudy	NREL	Garbak	Technology Validation: Fuel Cell Bus Evaluations	Systems Analysis
TVP 6	Wed, May 25	9:00-12:00	John Harness	HyRadix/SunLine	Gronich	Auto-Thermal Reforming Based Refueling Station at SunLine	Refueling Tech. Dev. & Demo.
TVP 7	Wed, May 25	9:00-12:00	Mark Wait	Air Products	Gronich	R&D of a PEM Fuel Cell, Hydrogen Reformer, and Vehicle Refueling Facility (Las Vegas Energy Park)	Refueling Tech. Dev. & Demo.
TVP 11	Wed, May 25	9:00-12:00	Neal Mulligan	Collier Techs.	Gronich	Hydrogen and Natural Gas Blends: Converting Light and Heavy Duty Vehicles	Vehicle Demonstrations
TVP 12	Wed, May 25	9:00-12:00	David Barnes	Vehicle Projects LLC	Gronich	Fuel Cell Powered Underground Mine Loader Vehicle	Vehicle Demonstrations
TVP 13	Wed, May 25	9:00-12:00	Robert Peters	U. of Alabama	Gronich	Global Assessment of Hydrogen Based Technologies	Vehicle Demonstrations
TVP 14	Wed, May 25	9:00-12:00	Margo Melendez	NREL	Gronich	Hydrogen Transition Infrastructure Analysis	Systems Analysis

Schedule as of: **Monday, May 16, 2005**

Wednesday Afternoon (Outside Salons B and C)

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Presenter</u>	<u>Organization</u>	<u>DOE TDM</u>	<u>Title</u>	<u>Sub-Program Category</u>
TVP 3	Wed, May 25	1:30-5:00	Dave McLean	NextEnergy	Gronich	NextEnergy Microgrid and Hydrogen Fueling Facility	H2/Fuel Cell Demo/Analysis
TVP 4	Wed, May 25	1:30-5:00	Andy Lutz	SNL	Gronich	Power Parks System Simulation	Systems Analysis
TVP 8	Wed, May 25	1:30-5:00	Robert Boehm	UNLV	Gronich	Hydrogen Filling Station	Refueling Tech. Dev. & Demo.

Schedule as of: **Monday, May 16, 2005**

2005 DOE HYDROGEN PROGRAM REVIEW

Safety, Codes & Standards Oral Presentations - Session B (Salons B and C)

Schedule as of: Monday, May 16, 2005

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Presenter</u>	<u>Organization</u>	<u>DOE TDM</u>	<u>Title</u>	<u>Sub-Program Category</u>	
SA 1	Thur, May 26	8:30 AM	Patrick Davis	DOE	Davis	Safety, Codes and Standards	NA	
SA 2	Thur, May 26	9:00 AM	Jim Ohi	NREL	Davis	Hydrogen Codes and Standards	Safety, Codes & Stans.	
SA 3	Thur, May 26	9:30 AM	Jay Keller	SNL	Davis	Research and Development for Hydrogen Safety, Codes and Standards	Safety, Codes & Stans.	
		Break						
		10:00 AM						
SA 4	Thur, May 26	10:30 AM	Cathy Padro	LANL	Davis	International Standards and Regulations	Safety, Codes & Stans.	
SA 5	Thur, May 26	11:00 AM	Bruce Kinzey	PNNL	Davis	HAMMER Emergency Response Training for the Hydrogen Economy	Safety, Codes & Stans.	
SA 6	Thur, May 26	11:30 AM	Steven Weiner	PNNL	Davis	Hydrogen Safety Review Panel	Safety, Codes & Stans.	
		Session Ends						
		12:00 PM						

Safety, Codes & Standards Poster Presentations

Schedule as of: Monday, May 16, 2005

Wednesday Afternoon (Outside Salons B and C)

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Presenter</u>	<u>Organization</u>	<u>DOE TDM</u>	<u>Title</u>	<u>Sub-Program Category</u>
SAP 1	Wed, May 25	1:30-5:00	Susan Schoenung	Longitude 122 West, Inc.	Davis	IEA Hydrogen Task 18: Evaluation of Integrated Demonstration Systems	Safety, Codes & Stans.
SAP 2	Wed, May 25	1:30-5:00	Mary-Rose de Valladares	M.R.S. Enterprises, LLC	Davis	IEA Hydrogen Implementing Agreement Secretariat	Safety, Codes & Stans.

2005 DOE HYDROGEN PROGRAM REVIEW

Education Oral Presentations - Session A (Salons V and VI)

Schedule as of: Monday, May 16, 2005

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Presenter</u>	<u>Organization</u>	<u>DOE TDM</u>	<u>Title</u>	<u>Sub-Program Category</u>
ED 1	Wed, May 25	4:00 PM	Christy Cooper	DOE		Hydrogen Education	NA
ED 2	Wed, May 25	4:25 PM	Ruth Borger	Lansing Comm. College	Cooper	Hydrogen/Alternative Energy Center	Education
ED 3	Wed, May 25	4:45 PM	John Griffin	Nicholls State Un.	Cooper	Shared Technology Transfer Project	Education
	Session Ends	5:05 PM					
ED 4	Thur, May 26	8:30 AM	Paul Williamson	U. of Montana	Cooper	Montana Hydrogen Futures Project	Education
ED 5	Thur, May 26	8:50 AM	Barbara Nagle	U of Cal. Berkeley	Cooper	Hydrogen Technology and Energy Curriculum	Education
ED 6	Thur, May 26	9:15 AM	Mary Spruill	NEED	Cooper	H2 Educate!	Education

Education Poster Presentations

Schedule as of: Monday, May 16, 2005

Thursday Morning (Outside Salons IV, V, and VI)

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Presenter</u>	<u>Organization</u>	<u>DOE TDM</u>	<u>Title</u>	<u>Sub-Program Category</u>
EDP 1	Thur, May 26	9:00-12:00	Tim Armstrong	ORNL	Cooper	Baseline Knowledge Assessment	Education
EDP 2	Thur, May 26	9:00-12:00	Cindi Andersen	Andersen Creative	Cooper	Hydrogen Technology Overview Publication and Program Information Kit	Education
EDP 3	Thur, May 26	9:00-12:00	Rick Tidball	Energy & Envr. Anal	Cooper	Understanding the Hydrogen Economy	Education
EDP 4	Thur, May 26	9:00-12:00	Patrick Serfass	NHA	Cooper	Broad-Based Solicitation - Hydrogen Education	Education
EDP 5	Thur, May 26	9:00-12:00	Bob Kripowicz	STAC	Cooper	Hydrogen Technology Learning Centers	Education

2005 DOE HYDROGEN PROGRAM REVIEW

Systems Analysis Oral Presentations - Session A (Salons V and VI)

Schedule as of: **Monday, May 16, 2005**

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Presenter</u>	<u>Organization</u>	<u>DOE TDM</u>	<u>Title</u>	<u>Sub-Program Category</u>
AN 1	Thur, May 26	9:40 AM	Fred Joseck	DOE		Systems Analysis	NA
AN 2	Thur, May 26	10:05 AM	Maggie Mann	NREL	Joseck	Moving Toward Consistent Analysis in the HFC&IT Program: H2A	Systems Analysis
		Break					
		10:30 AM					
AN 3	Thur, May 26	10:50 AM	David Greene	ORNL	Joseck	Hydrogen Transition Modeling and Analysis:	Systems Analysis
AN 4	Thur, May 26	11:15 AM	Walter Short	NREL	Joseck	WinDS-H2 Model and Analysis	Systems Analysis
AN 5	Thur, May 26	11:40 AM	Joan Ogden	UC Davis	Joseck	Technical and Economic Studies of Regional Transition Strategies toward Widespread Use of Hydrogen Energy	Systems Analysis
AN 6	Thur, May 26	12:05 PM	Stephen Lasher	TIAX LLC	Joseck	Fuel Choice for FCVs: Hydrogen Infrastructure Costs	Systems Analysis
		Session Ends					
		12:30 PM					

Systems Analysis Poster Presentations

Schedule as of: **Monday, May 16, 2005**

Thursday Morning (Outside Salons II, III, and IV)

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Presenter</u>	<u>Organization</u>	<u>DOE TDM</u>	<u>Title</u>	<u>Sub-Program Category</u>
ANP 1	Thur, May 26	9:00-12:00	Bill Dougherty	Tellus	Joseck	Hydrogen Production in a GHG-Constrained Situation: Major Results & Conclusions	Systems Analysis
ANP 2	Thur, May 26	9:00-12:00	Brian D. James	Directed Techs.	Joseck	Hydrogen Production Infrastructure Options	Systems Analysis
ANP 3	Thur, May 26	9:00-12:00	Harry Vidas	Energy & Envr. Analysis	Joseck	Impact of Hydrogen Production on U.S. Energy Markets	Systems Analysis
ANP 4	Thur, May 26	9:00-12:00	George Tolley	RCF, Inc.	Joseck	Analysis of the Hydrogen Production and Delivery Infrastructure as a Complex Adaptive System	Systems Analysis
ANP 5	Thur, May 26	9:00-12:00	Marylynn Placet	PNNL	Joseck	Hydrogen Analysis Support	Systems Analysis
ANP 6	Thur, May 26	9:00-12:00	Mark Ruth	NREL	Joseck	Macro-System Model	Systems Analysis
ANP 7	Thur, May 26	9:00-12:00	Michael Wang	ANL	Joseck	Well-to-Wheels Analysis with the GREET Model	Systems Analysis

2005 DOE HYDROGEN PROGRAM REVIEW

Alphabetical List of Presentations by Presenter

Tuesday, May 17, 2005

Presenter Name									
Last	First	Organization	Type	Date	Time	Number	Session	Sub-Program	Category
Aardahl	Chris	PNNL	Poster	Tues, May 24 Mon, May 23	7:30-8:30 4-7 PM	STP 3	P	Chemical	Hydrides
Aaron	Tim	Praxair	Poster	Tues, May 24	1:30-5:00	PDP 4	P	Distributed	Production
Aceves	Salvador	LLNL	Poster	Wed, May 25	9:00-12:00	PDP 54	P	Hydrogen	Delivery
Aceves	Salvador	LLNL	Oral	Tues, May 24	4:15 PM	ST 16	B	Compressed/Liquid	Tanks
Adams	Thad	SRNL	Poster	Wed, May 25	9:00-12:00	PDP 52	P	Hydrogen	Delivery
Adzic	Radoslav	Brookhaven Nat. Lab.	Oral	Tues, May 24	1:35 PM	FC 17	C	Catalysts	
Ahluwalia	Rajesh	ANL	Oral	Wed, May 25	1:40 PM	FC 35	C	Trans. Sys & BOP	
Ahluwalia	Rajesh	ANL	Oral	Wed, May 25	10:15 AM	ST 20	B	Testing & Analysis	
Ahmed	Shabbir	ANL	Poster	Tues, May 24	9:00-12:00	FCP 25	P	Fuel	Processing
Ahmed	Shabbir	ANL	Poster	Tues, May 24	1:30-5:00	PDP 7	P	Distributed	Production
Ahn	Channing	Cal. Inst. of Tech.	Poster	Tues, May 24 Mon, May 23	6:30-7:30 4-7 PM	STP 21	P	Metal	Hydrides
Ahn	Channing	Cal. Inst. of Tech.	Poster	Tues, May 24 Mon, May 23	7:30-8:30 4-7 PM	STP 34	P	Carbon	Materials
Alam	Mohammad	U of S. Alabama	Poster	Tues, May 24	9:00-12:00	FCP 18	P	Stationary	Power Systems
Andersen	Cindi	Andersen Creative	Poster	Thur, May 26	9:00-12:00	EDP 2	P	Education	
Anton	Don	UTRC	Oral	Tues, May 24	8:55 AM	ST 4	B	Metal	Hydrides
Arduengo	Anthony	U of Alabama	Poster	Tues, May 24 Mon, May 23	7:30-8:30 4-7 PM	STP 5	P	Chemical	Hydrides
Arif	Muhammad	NIST	Oral	Wed, May 25	3:20 PM	FC 38	C	Fuel Cell	Characterization
Armstrong	Tim	ORNL	Poster	Thur, May 26	9:00-12:00	EDP 1	P	Education	
Atanasoski	Radoslav	3M	Oral	Tues, May 24	11:05 AM	FC 14	C	Catalysts	
Atanassova	Paolina	Superior MicroPowders	Oral	Tues, May 24	2:25 PM	FC 19	C	Catalysts	
Atwood	Jerry	U of Missouri - St. Louis	Poster	Wed, May 25	9:00-1:00	STP 53	P	New Mat'l's & Concepts	
Bailey	Sterling	Mechanology, LLC	Oral	Wed, May 25	9:15 AM	FC 28	C	Trans. Sys & BOP	
Balachandran	Balu	ANL	Poster	Wed, May 25	1:30-5:00	PDP 14	P	DOE Fossil	Energy
Balachov	Iouri	SRI International	Poster	Mon, May 23	1:45-5:00	PDP 43	P	Electrolysis	
Barnes	David	Vehicle Projects LLC	Poster	Wed, May 25	9:00-12:00	TVP 12	P	Vehicle	Demonstrations
Bessette	Norm	Nisource Energy Tech.	Poster	Tues, May 24	1:30-5:00	PDP 5	P	Production	
Bischoff	Brian	ORNL	Oral	Tues, May 24	10:45 AM	PD 12	A	DOE Fossil	Energy
Bischoff	Brian	ORNL	Poster	Wed, May 25	1:30-5:00	PDP 18	P	Separations	
Bischoff	Brian	ORNL	Poster	Wed, May 25	1:30-5:00	PDP 19	P	DOE Nuclear	Energy
Blake	Dan	NREL	Oral	Tues, May 24	3:20 PM	PD 19	A	Biological	Production
Bloom	Ira	ANL	Poster	Tues, May 24	9:00-12:00	FCP 29	P	Fuel Cell	Characterization
Boehm	Robert	UNLV	Poster	Wed, May 25	1:30-5:00	TVP 8	P	Refueling Tech. Dev. & Demo.	
BonHoff	Klaus	DaimlerChrysler	Oral	Wed, May 25	3:55 PM	TV 9	B	Vehicle	Demonstrations
Borger	Ruth	Lansing Comm. College	Oral	Wed, May 25	4:25 PM	ED 2	A	Education	
Borup	Rodney	LANL	Oral	Wed, May 25	4:10 PM	FC 40	C	Fuel Cell	Characterization
Bota	Kofi	Clark Atlanta Univ.	Poster	Wed, May 25	9:00-12:00	TVP 1	P	Power Parks	Analysis
Bourgeois	Richard	GE Global Research	Poster	Tues, May 24	1:30-5:00	PDP 10	P	Electrolysis	
Bowman	Robert	Jet Propulsion Lab	Poster	Tues, May 24 Mon, May 23	7:30-8:30 4-7 PM	STP 17	P	Metal	Hydrides
Brodrick	Christie-Joy	UC Davis	Poster	Tues, May 24	1:30-5:00	FCP 32	P	Auxiliary/Portable	Power
Brown	Gilbert	ORNL	Poster	Tues, May 24 Mon, May 23	7:30-8:30 4-7 PM	STP 19	P	Metal	Hydrides
Cabasso	Israel	SUNY - Syracuse	Poster	Wed, May 25	9:00-1:00	STP 46	P	Carbon	Materials
Campbell	Stephen	Ballard	Oral	Tues, May 24	10:40 AM	FC 13	C	Catalysts	
Carlson	Todd	Air Products	Oral	Wed, May 25	2:25 PM	TV 6	B	Refueling Tech. Dev. & Demo.	
Carter	J. David	ANL	Oral	Wed, May 25	2:05 PM	FC 36	C	Auxiliary/Portable	Power
Chandra	Dhanesh	U of Nev. - Reno	Poster	Tues, May 24 Mon, May 23	6:30-7:30 4-7 PM	STP 24	P	Metal	Hydrides
Chen	Christopher	Air Products	Poster	Wed, May 25	1:30-5:00	PDP 15	P	Distributed	Production
Chen	Tan-Ping	Nexant Inc.	Poster	Wed, May 25	9:00-12:00	PDP 50	P	Hydrogen	Delivery
Clark	Tom	UTC	Oral	Thur, May 26	10:25 AM	FC 46	C	Stationary	Power Systems
Clemens	Bruce	Stanford Univ.	Poster	Tues, May 24 Mon, May 23	7:30-8:30 4-7 PM	STP 22	P	Metal	Hydrides
Cooper	Christy	DOE	Oral	Wed, May 25	4:00 PM	ED 1	A	NA	
Cooper	Alan	Air Products	Oral	Tues, May 24	3:25 PM	ST 14	B	Chemical	Hydrides
Cornelius	Christopher	SNL	Poster	Tues, May 24	1:30-5:00	FCP 5	P	Membranes & MEAs	
Cortright	Randy	Virent Energy Sys.	Oral	Mon, May 23	5:05 PM	PD 7	A	Distributed	Production
Cropley	Cecelia	Giner Electrochemical	Oral	Wed, May 25	8:30 AM	PD 23	A	Electrolysis	
Damle	Ashok	Research Triangle Inst.	Poster	Wed, May 25	9:00-1:00	STP 13	P	New Mat'l's & Concepts	
Das	Subodh K.	Secat, Inc.	Oral	Wed, May 25	3:30 PM	PD 35	A	Hydrogen	Delivery
Davis	Patrick	DOE	Oral	Thur, May 26	8:30 AM	SA 1	B	NA	
de Valladares	Mary-Rose	M.R.S. Enterprises, LLC	Poster	Wed, May 25	1:30-5:00	SAP 2	P	Safety, Codes & Stans.	
DeCarmin	Tony	Oxford Perf. Matls.	Poster	Tues, May 24	1:30-5:00	FCP 2	P	Membranes & MEAs	
DeCastro	Emory	De Nora	Oral	Mon, May 23	2:15 PM	FC 2	C	MEAs	
Deng	Xunming	U of Toledo	Poster	Mon, May 23	1:45-5:00	PDP 58	P	Photoelectrochemical	
Devlin	Pete	DOE	Oral	Mon, May 23	1:45 PM	PD 1	A	NA	

Dougherty	Bill	Tellus	Poster	Thur, May 26	9:00-12:00	ANP	1	P	Systems Analysis
Eckert	Juergen	U of C – Santa Barbara	Poster	Wed, May 25	9:00-1:00	STP	50	P	New Mat'l's & Concepts
Eklund	Peter	Penn State Univ.	Poster	Tues, May 24	7:30-8:30	STP	36	P	Carbon Materials
				Mon, May 23	4-7 PM				
Erickson	Paul Anders	U Cal., Davis	Poster	Tues, May 24	1:30-5:00	PDP	8	P	DOE Fossil Energy
Escobedo	Gonzalo	Dupont	Oral	Tues, May 24	8:30 AM	FC	9	C	Membranes & MEAs
Eudy	Leslie	NREL	Poster	Wed, May 25	9:00-12:00	TVP	5	P	Systems Analysis
Evans	Bob	NREL	Poster	Wed, May 25	9:00-12:00	PDP	55	P	Distributed Production
Fan	Liang Shih	Ohio State Un.	Poster	Tues, May 24	1:30-5:00	PDP	1	P	DOE Fossil Energy
Fan	Chinbay	GTI	Poster	Wed, May 25	9:00-1:00	STP	45	P	Carbon Materials
Fang	Zak	University of Utah	Poster	Tues, May 24	7:30-8:30	STP	26	P	Metal Hydrides
				Mon, May 23	4-7 PM				
Feng	Zhili	ORNL	Oral	Wed, May 25	2:30 PM	PD	33	A	Hydrogen Delivery
Ferguson	Joe	City of Chattanooga	Poster	Wed, May 25	9:00-12:00	TVP	2	P	Power Parks Analysis
Foure	Michel	Arkema Chemicals	Oral	Tues, May 24	2:00 PM	FC	18	C	Membranes & MEAs
Frenette	Greg	Ford	Oral	Wed, May 25	4:15 PM	TV	10	B	Vehicle Demonstrations
Garzon	Fernando	LANL	Oral	Wed, May 25	2:30 PM	FC	37	C	Fuel Cell Characterization
Gee	Mark K.	Honeywell	Oral	Wed, May 25	8:50 AM	FC	27	C	Trans. Sys & BOP
Gehman	Richard	Honeywell	Oral	Wed, May 25	10:45 AM	FC	31	C	Trans. Sys & BOP
Geohegan	David	ORNL	Poster	Tues, May 24	7:30-8:30	STP	32	P	Carbon Materials
				Mon, May 23	4-7 PM				
Ghirardi	Maria	NREL	Oral	Tues, May 24	1:40 PM	PD	16	A	Biological Production
Gogotsi	Yury	U of Pennsylvania	Poster	Wed, May 25	9:00-1:00	STP	44	P	Carbon Materials
Greene	David	ORNL	Oral	Thur, May 26	10:50 AM	AN	3	A	Systems Analysis
Griffin	John	Nicholls State Un.	Oral	Wed, May 25	4:45 PM	ED	3	A	Education
Gronich	Sig	DOE	Oral	Wed, May 25	11:05 AM	TV	1	B	NA
Grot	Stephen	Ion Power, Inc.	Oral	Tues, May 24	2:45 PM	FC	20	C	Platinum Recycling
Guro	David	Air Products	Oral	Mon, May 23	3:50 PM	PD	4	A	Distributed Production
Hall	Matt	Alfred University	Poster	Wed, May 25	9:00-1:00	STP	47	P	New Mat'l's & Concepts
Harness	John	HyRadix/SunLine	Poster	Wed, May 25	9:00-12:00	TVP	6	P	Refueling Tech. Dev. & Demo.
Hartvigsen	Joseph	Ceramatec Inc.	Poster	Tues, May 24	1:30-5:00	PDP	12	P	Electrolysis
Hawthorne	Fred	U of Cal. – Los Angeles	Poster	Tues, May 24	7:30-8:30	STP	7	P	Chemical Hydrides
				Mon, May 23	4-7 PM				
Heben	Mike	NREL	Oral	Wed, May 25	8:00 AM	ST	18	B	Carbon Materials
Heben	Mike	NREL	Poster	Tues, May 24	6:30-8:30	STP	30	P	Carbon Materials
				Mon, May 23	4-7 PM				
Heben	Mike	NREL	Poster	Tues, May 24	6:30-8:30	STP	63	P	Carbon Materials
				Mon, May 23	4-7 PM				
Hechanova	Tony	UNLV	Oral	Wed, May 25	1:15 PM	PD	30	A	DOE Nuclear Energy
Heinekey	Mike	U of Washington	Poster	Tues, May 24	7:30-8:30	STP	9	P	Chemical Hydrides
				Mon, May 23	4-7 PM				
Henderson	A. David	DOE	Oral	Mon, May 23	2:15 PM	PD	36	A	Prod. Using Nuclear
Hicks	Mike	3M	Oral	Tues, May 24	9:45 AM	FC	12	C	Membranes & MEAs
Hobbs	Raymond	Pinnacle	Oral	Wed, May 25	1:35 PM	TV	4	B	Power Parks Analysis
Holmes	Tom	Nuvera	Oral	Thur, May 26	9:45 AM	FC	45	C	Fuel Processing
Hopkins	Scott	Pall Corp.	Poster	Wed, May 25	1:30-5:00	PDP	26	P	Separations
Hwang	Jim	Mich.Tech. Univ.	Poster	Wed, May 25	9:00-1:00	STP	49	P	New Mat'l's & Concepts
Ibrahim	Samir	Teledyne	Oral	Wed, May 25	10:15 AM	PD	26	A	Electrolysis
James	Brian D.	Directed Techs.	Poster	Thur, May 26	9:00-12:00	ANP	2	P	Systems Analysis
Jensen	Craig	Univ. of Hawaii	Oral	Tues, May 24	8:30 AM	ST	3	B	Metal Hydrides
Jensen	Craig	Univ. of Hawaii	Poster	Tues, May 24	7:30-8:30	STP	59	P	Metal Hydrides
				Mon, May 23	4-7 PM				
Jiang	Junhua	NuVant Systems	Poster	Mon, May 23	1:45-5:00	FCP	10	P	Catalysts
Johnson	Karl	U of Pittsburgh	Poster	Tues, May 24	7:30-8:30	STP	25	P	Metal Hydrides
				Mon, May 23	4-7 PM				
Joseck	Fred	DOE	Oral	Thur, May 26	9:40 AM	AN	1	A	NA
Keenan	Greg	Air Products	Oral	Wed, May 25	1:55 PM	TV	5	B	Power Parks Analysis
Keller	Jay	SNL	Oral	Thur, May 26	9:30 AM	SA	3	B	Safety, Codes & Stans.
Kelly	Ken	NREL	Poster	Tues, May 24	9:00-12:00	FCP	16	P	Stationary Power Systems
Kepler	Keith	Farasis Energy	Poster	Mon, May 23	1:45-5:00	FCP	9	P	Catalysts
Khaleel	Mo	PNNL	Poster	Mon, May 23	1:45-5:00	FCP	11	P	Auxiliary/Portable Power
Killmeyer	Richard	NETL	Poster	Wed, May 25	1:30-5:00	PDP	25	P	DOE Fossil Energy
Kim	Yu Seung	LANL	Oral	Wed, May 25	4:35 PM	FC	41	C	Cold Operation
King	David	PNNL	Oral	Mon, May 23	4:40 PM	PD	6	A	Distributed Production
Kinzey	Bruce	PNNL	Oral	Thur, May 26	11:00 AM	SA	5	B	Safety, Codes & Stans.
Knight	Brian	UTCFC	Oral	Wed, May 25	10:20 AM	FC	30	C	Trans. Sys & BOP
Krause	Theodore	ANL	Oral	Tues, May 24	4:30 PM	FC	24	C	Fuel Processing
Krause	Theodore	ANL	Oral	Tues, May 24	4:50 PM	FC	25	C	Fuel Processing
Kripowicz	Bob	STAC	Poster	Thur, May 26	9:00-12:00	EDP	5	P	Education
Kroposki	Ben	NREL	Oral	Wed, May 25	9:20 AM	PD	25	A	Electrolysis
Kumar	Ravi	GE Energy	Oral	Mon, May 23	3:05 PM	PD	3	A	Distributed Production
Lane	Clinton	N. Arizona Univ	Poster	Tues, May 24	7:30-8:30	STP	14	P	Chemical Hydrides
				Mon, May 23	4-7 PM				
Lanning	Bruce	SwRI	Poster	Wed, May 25	1:30-5:00	PDP	16	P	DOE Fossil Energy
Lara-Curzio	Edgar	ORNL	Poster	Tues, May 24	9:00-12:00	FCP	20	P	Trans. Sys & BOP
Lasher	Stephen	TIAX LLC	Oral	Thur, May 26	12:05 PM	AN	6	A	Systems Analysis
Lasher	Stephen	TIAX LLC	Oral	Wed, May 25	9:30 AM	ST	19	B	Testing & Analysis

Lau	Francis	GTI	Oral	Tues, May 24	11:10 AM	PD	13	A	Separations
Lau	Francis	GTI	Poster	Wed, May 25	1:30-5:00	PDP	24	P	DOE Fossil Energy
Lee	James	ORNL	Oral	Tues, May 24	2:05 PM	PD	17	A	Biological Production
Lewis	Michele	ANL	Oral	Wed, May 25	11:35 AM	PD	29	A	DOE Nuclear Energy
Lightner	Valri	DOE	Oral	Mon, May 23	1:45 PM	FC	1	C	NA
Lin	Jerry Y.S.	U. of Cincinnati	Poster	Tues, May 24	1:30-5:00	PDP	11	P	Separations
Linehan	Susan	Rohm and Haas	Poster	Tues, May 24	7:30-8:30	STP	11	P	Chemical Hydrides
				Mon, May 23	4-7 PM				
Liss	Bill	GTI	Oral	Mon, May 23	4:15 PM	PD	5	A	Distributed Production
Liu	Ke	GE Global Res.	Oral	Tues, May 24	9:20 AM	PD	10	A	Distributed Production
Liu	Paul KT	Media & Process Tech.	Poster	Tues, May 24	1:30-5:00	PDP	9	P	DOE Fossil Energy
Livengood	David	ANL	Poster	Wed, May 25	9:00-12:00	PDP	53	P	Hydrogen Delivery
Lomax, Jr.	Frank	H2Gen Inno. Inc.	Oral	Tues, May 24	8:55 AM	PD	9	A	Distributed Production
Lui	Jie	Duke University	Poster	Tues, May 24	6:30-7:30	STP	35	P	Carbon Materials
				Mon, May 23	4-7 PM				
Lutz	Andy	SNL	Poster	Wed, May 25	1:30-5:00	TVP	4	P	Systems Analysis
Lynch	David	Startech Environmental	Poster	Wed, May 25	9:00-12:00	PDP	27	P	Biomass Reforming
Ma	Junqing	T/J Technologies	Poster	Tues, May 24	1:30-5:00	FCP	6	P	Membranes & MEAs
MacDiarmid	Alan	U of Pennsylvania	Poster	Tues, May 24	7:30-8:30	STP	42	P	Carbon Materials
				Mon, May 23	4-7 PM				
MacDonald	Digby	Penn State Univ.	Poster	Tues, May 24	6:30-7:30	STP	4	P	Chemical Hydrides
				Mon, May 23	4-7 PM				
MacQueen	Brent	SRI International	Poster	Mon, May 23	1:45-5:00	PDP	33	P	Photoelectrochemical
Madan	Arun	MVSystems, Inc.	Poster	Mon, May 23	1:45-5:00	PDP	37	P	Photoelectrochemical
Mallock	Prof. Tom	Penn State Univ.	Oral	Mon, May 23	2:30 PM	PD	37	A	0
Maloney	Tom	Northern Power Sys.	Poster	Wed, May 25	1:30-5:00	PDP	28	P	Electrolysis
Maness	PinChing	NREL	Oral	Tues, May 24	2:30 PM	PD	18	A	Biological Production
Mann	Maggie	NREL	Oral	Thur, May 26	10:05 AM	AN	2	A	Systems Analysis
Mao	Samuel	U of California	Oral	Tues, May 24	10:50 AM	ST	8	B	New Mat'l's & Concepts
Martin	Michael	Edison Materials Tech	Poster	Wed, May 25	9:00-12:00	PDP	57	P	Cross-Cutting
Matthews	Michael	U of S. Carolina	Poster	Wed, May 25	9:00-1:00	STP	56	P	Metal Hydrides
Maupin	Dr. Paul	DOE/BES	Oral	Mon, May 23	2:05 PM	FC	51	C	0
McClaine	Andy	Safe Hydrogen	Oral	Tues, May 24	2:40 PM	ST	13	B	Chemical Hydrides
McFarland	Eric	U of Cal. Santa Barbara	Oral	Tues, May 24	4:35 PM	PD	22	A	Photoelectrochemical
McIntyre	Tim	ORNL	Oral	Thur, May 26	8:30 AM	FC	42	C	Trans. Sys & BOP
McLean	Dave	NextEnergy	Poster	Wed, May 25	1:30-5:00	TVP	3	P	H2/Fuel Cell Demo/Analysis
McNulty	Thomas	GE Global Research	Poster	Mon, May 23	1:45-5:00	PDP	34	P	Photoelectrochemical
Melendez	Margo	NREL	Poster	Wed, May 25	9:00-12:00	TVP	14	P	Systems Analysis
Melis	Tasios	UC Berkeley	Oral	Tues, May 24	1:15 PM	PD	15	A	Biological Production
Melis	Tasios	UC Berkeley	Poster	Mon, May 23	1:45-5:00	PDP	29	P	Biological Production
Miller	Eric	U of Hawaii	Oral	Tues, May 24	3:45 PM	PD	20	A	Photoelectrochemical
Mintz	Marianne	ANL	Oral	Wed, May 25	2:05 PM	PD	32	A	Hydrogen Delivery
Mohapatra	Satish	Advanced Fluids Tech.	Poster	Tues, May 24	9:00-12:00	FCP	21	P	Trans. Sys & BOP
More	Karren	ORNL	Oral	Tues, May 24	4:10 PM	FC	23	C	Bipolar Plates
More	Karren	ORNL	Oral	Wed, May 25	3:45 PM	FC	39	C	Fuel Cell Characterization
Muga	Luis	TOFTEC, Inc.	Poster	Wed, May 25	9:00-1:00	STP	54	P	New Mat'l's & Concepts
Mulligan	Neal	Collier Techs.	Poster	Wed, May 25	9:00-12:00	TVP	11	P	Vehicle Demonstrations
Myers	Debbie	ANL	Oral	Mon, May 23	4:50 PM	FC	7	C	Membranes & MEAs
Myers	Debbie	ANL	Poster	Tues, May 24	1:30-5:00	FCP	8	P	Catalysts
Nagle	Barbara	U of Cal. Berkeley	Oral	Thur, May 26	8:50 AM	ED	5	A	Education
Narayanan	S.	JPL	Poster	Tues, May 24	9:00-12:00	FCP	22	P	Auxiliary/Portable Power
Nenoff	Tina	SNL	Poster	Wed, May 25	1:30-5:00	PDP	17	P	Separations
Neumann	Dan	NIST	Poster	Tues, May 24	6:30-7:30	STP	33	P	Carbon Materials
				Mon, May 23	4-7 PM				
Newman	John	LBNL	Oral	Wed, May 25	5:00 PM	FC	50	C	Fuel Cell Characterization
Newman	John	LBNL	Poster	Tues, May 24	9:00-12:00	FCP	33	P	Fuel Cell Characterization
Norrick	Dan	Cummins	Poster	Tues, May 24	1:30-5:00	FCP	31	P	Auxiliary/Portable Power
Ogden	Joan	UC Davis	Oral	Thur, May 26	11:40 AM	AN	5	A	Systems Analysis
Ohi	Jim	NREL	Oral	Thur, May 26	9:00 AM	SA	2	B	Safety, Codes & Stans.
Olson	Greg	Hughes Research Labs	Poster	Tues, May 24	6:30-7:30	STP	28	P	Metal Hydrides
				Mon, May 23	4-7 PM				
Opalka	Susanne	UTRC	Oral	Tues, May 24	9:45 AM	ST	6	B	Metal Hydrides
Padro	Cathy	LANL	Oral	Thur, May 26	10:30 AM	SA	4	B	Safety, Codes & Stans.
Page	Richard	SwRI	Oral	Wed, May 25	10:40 AM	ST	21	B	Testing & Analysis
Paulose	Rajesh	Chevron Texaco	Oral	Wed, May 25	4:35 PM	TV	11	B	Vehicle Demonstrations
Payzant	Andrew	ORNL	Poster	Wed, May 25	1:30-5:00	PDP	21	P	Separations
Pedersen	Mark	Air Products	Oral	Wed, May 25	3:35 PM	TV	8	B	Vehicle Demonstrations
Perret	Bob	Univ. of Nevada	Oral	Wed, May 25	11:05 AM	PD	28	A	Hi-Temp Thermochemical
Pesaran	Ahmad	NREL	Poster	Tues, May 24	9:00-12:00	FCP	19	P	Trans. Sys & BOP
Peters	John	Montana State U.	Poster	Mon, May 23	1:45-5:00	PDP	36	P	Photoelectrochemical
Peters	Robert	U. of Alabama	Poster	Wed, May 25	9:00-12:00	TVP	13	P	Vehicle Demonstrations
Pez	Guido	Air Products	Oral	Wed, May 25	3:10 PM	PD	34	A	Hydrogen Delivery
Pez	Guido	Air Products	Poster	Tues, May 24	6:30-7:30	STP	43	P	Carbon Materials
				Mon, May 23	4-7 PM				
Pickard	Paul	INL/SNL	Oral	Wed, May 25	10:40 AM	PD	27	A	DOE Nuclear Energy
Pile	Donald	SNL	Poster	Mon, May 23	1:45-5:00	PDP	39	P	Electrolysis
Pivovar	Bryan	LANL	Poster	Tues, May 24	1:30-5:00	FCP	4	P	Membranes & MEAs

Pivovar	Bryan	LANL	Poster	Tues, May 24	9:00-12:00	FCP	28	P	Fuel Cell Characterization
Placet	Marylynn	PNNL	Poster	Thur, May 26	9:00-12:00	ANP	5	P	Systems Analysis
Polle	Juergen	Adv. Bionutrition Corp	Poster	Mon, May 23	1:45-5:00	PDP	30	P	Biological Production
Pont	Giullermo	Honeywell	Oral	Wed, May 25	9:40 AM	FC	29	C	Trans. Sys & BOP
Popov	Branko N.	U of So. Carolina	Oral	Tues, May 24	11:30 AM	FC	15	C	Catalysts
Porter	Stephen	Proton Energy Systems	Poster	Mon, May 23	1:45-5:00	PDP	41	P	Electrolysis
Power	Philip	U of Cal. - Davis	Poster	Tues, May 24	6:30-7:30	STP	6	P	Chemical Hydrides
				Mon, May 23	4-7 PM				
Protsailo	Lesia	UTC	Oral	Mon, May 23	3:30 PM	FC	4	C	MEAs
Regan	Rob	DTE Energy	Oral	Wed, May 25	11:35 AM	TV	2	B	Power Parks Analysis
Richards	Mark	GTI	Poster	Wed, May 25	9:00-1:00	STP	57	P	Compressed/Liquid Tanks
Ritter	Jim	U of S. Carolina	Poster	Wed, May 25	9:00-1:00	STP	55	P	New Mat'l's & Concepts
Robertson	Ian	U of Ill. - U-C	Poster	Tues, May 24	6:30-7:30	STP	23	P	Metal Hydrides
				Mon, May 23	4-7 PM				
Rocheleau	Richard	Hawaii Natural Energy	Oral	Wed, May 25	1:15 PM	TV	3	B	Power Parks Analysis
Rockward	Tommy	LANL	Poster	Tues, May 24	9:00-12:00	FCP	27	P	Fuel Cell Characterization
Ross	Phil	LBNL	Oral	Tues, May 24	8:55 AM	FC	10	C	Catalysts
Ruth	Mark	NREL	Poster	Thur, May 26	9:00-12:00	ANP	6	P	Systems Analysis
Ruud	James	GE Global Research	Poster	Mon, May 23	1:45-5:00	PDP	42	P	Electrolysis
Ryan	Chuck	Natl Center for Manf.Sc	Oral	Tues, May 24	4:40 PM	ST	17	B	New Mat'l's & Concepts
Sachtler	Adriaan	UOP	Oral	Tues, May 24	9:20 AM	ST	5	B	Metal Hydrides
Sammells	Anthony	Eltron Res. Inc.	Oral	Tues, May 24	9:45 AM	PD	11	A	DOE Fossil Energy
Satcher	Joe	LLNL	Poster	Tues, May 24	6:30-7:30	STP	31	P	Carbon Materials
				Mon, May 23	4-7 PM				
Satyapal	Sunita	DOE	Oral	Mon, May 23	1:45 PM	ST	1	B	NA
Schmura	Eileen	Concurrent Tech. Corp	Poster	Wed, May 25	9:00-12:00	PDP	49	P	Hydrogen Delivery
Schneider	Mark	Del. Co.Electric Co-op	Poster	Tues, May 24	9:00-12:00	FCP	17	P	Stationary Power Systems
Schoenung	Susan	Longitude 122 West, In	Poster	Wed, May 25	1:30-5:00	SAP	1	P	Safety, Codes & Stans.
Schwartz	Viviane	ORNL	Oral	Wed, May 25	8:30 AM	FC	26	C	Fuel Processing
Schwartz	Joseph	Praxair	Poster	Tues, May 24	1:30-5:00	PDP	3	P	Distributed Production
Serfass	Patrick	NHA	Poster	Thur, May 26	9:00-12:00	EDP	4	P	Education
Shaw	Leon	U of Connecticut	Poster	Wed, May 25	9:00-1:00	STP	51	P	New Mat'l's & Concepts
Sherman	Steve	INL	Oral	Wed, May 25	1:40 PM	PD	31	A	DOE Nuclear Energy
Shimko	Martin	Gas Equip. Engr. Corp.	Poster	Wed, May 25	9:00-12:00	PDP	46	P	Hydrogen Delivery
Shore	Larry	Engelhard	Oral	Tues, May 24	3:25 PM	FC	21	C	Platinum Recycling
Short	Walter	NREL	Oral	Thur, May 26	11:15 AM	AN	4	A	Systems Analysis
Sievers	Bob	MTI MicroFuel Cells	Oral	Wed, May 25	11:10 AM	FC	32	C	Auxiliary/Portable Power
Simopoulos	George	Delphi	Poster	Tues, May 24	1:30-5:00	FCP	30	P	Auxiliary/Portable Power
Simpkins	Erik	Idatech	Oral	Thur, May 26	8:55 AM	FC	43	C	Auxiliary/Portable Power
Smalley	Richard	Rice University	Poster	Tues, May 24	6:30-7:30	STP	37	P	Carbon Materials
				Mon, May 23	4-7 PM				
Smith	Hamilton	J. Craig Venter Inst.	Poster	Mon, May 23	1:45-5:00	PDP	31	P	Biological Production
Smith	Barton	ORNL	Poster	Wed, May 25	9:00-12:00	PDP	51	P	Hydrogen Delivery
Sneddon	Larry	U of Pennsylvania	Poster	Tues, May 24	6:30-7:30	STP	8	P	Chemical Hydrides
				Mon, May 23	4-7 PM				
Sofronis	Petros	U. of Illinois	Poster	Wed, May 25	9:00-12:00	PDP	48	P	Hydrogen Delivery
Spangler	Lee	Montana State Univ.	Poster	Tues, May 24	1:30-5:00	FCP	1	P	Membranes & MEAs
Spruill	Mary	NEED	Oral	Thur, May 26	9:15 AM	ED	6	A	Education
Stefanakos	Lee	U. of South Fl.	Oral	Tues, May 24	11:40 AM	ST	10	B	New Mat'l's & Concepts
Stefanakos	Lee	U. of South Fl.	Poster	Wed, May 25	9:00-1:00	STP	2	P	New Mat'l's & Concepts
Stevens	Jim	ChevronTexaco	Oral	Thur, May 26	9:20 AM	FC	44	C	Fuel Processing
Stone	Harry J.	Battelle	Oral	Thur, May 26	11:15 AM	FC	48	C	Stationary Power Systems
Struzhkin	Viktor	Carnegie Institute	Poster	Wed, May 25	9:00-1:00	STP	48	P	New Mat'l's & Concepts
Summers	Bill	SRS	Poster	Mon, May 23	1:45-5:00	PDP	45	P	DOE Nuclear Energy
Swider-Lyons	Karen	NRL	Oral	Tues, May 24	1:15 PM	FC	16	C	Catalysts
Talu	Orhan	Cleveland State Un.	Oral	Tues, May 24	10:25 AM	ST	7	B	New Mat'l's & Concepts
Tamhankar	Satish	BOC Group, Inc.	Oral	Tues, May 24	8:30 AM	PD	8	A	Distributed Production
Tao	Greg	MSRI	Oral	Mon, May 23	2:40 PM	PD	2	A	Distributed Production
Taylor	Kyle	IdaTech	Oral	Thur, May 26	11:35 AM	FC	49	C	Stationary Power Systems
Thompson	Levi	U of Michigan	Poster	Tues, May 24	9:00-12:00	FCP	14	P	Fuel Processing
Thompson	Robert	New Concepts Res. Cc	Poster	Wed, May 25	9:00-12:00	PDP	47	P	Hydrogen Delivery
Tidball	Rick	Energy & Envr. Analyisi	Poster	Thur, May 26	9:00-12:00	EDP	3	P	Education
Tolley	George	RCF, Inc.	Poster	Thur, May 26	9:00-12:00	ANP	4	P	Systems Analysis
Tumas	Bill	LANL	Oral	Tues, May 24	1:15 PM	ST	11	B	Chemical Hydrides
Tumas	Bill	LANL	Poster	Tues, May 24	6:30-8:30	STP	60	P	Chemical Hydrides
				Mon, May 23	4-7 PM				
Tumas	Bill	LANL	Poster	Tues, May 24	6:30-8:30	STP	61	P	Chemical Hydrides
				Mon, May 23	4-7 PM				
Turner	John	NREL	Poster	Tues, May 24	9:00-12:00	FCP	3	P	Membranes & MEAs
Turner	John	NREL	Poster	Mon, May 23	1:45-5:00	FCP	12	P	Bipolar Plates
Turner	John	NREL	Oral	Tues, May 24	4:10 PM	PD	21	A	Photoelectrochemical
Udovic	Terry	NIST	Poster	Tues, May 24	6:30-7:30	STP	18	P	Metal Hydrides
				Mon, May 23	4-7 PM				
Vanderspurt	Tom	United Tech. Res.Ctr.	Oral	Tues, May 24	11:35 AM	PD	14	A	Biomass Reforming
Vidas	Harry	Energy & Envr. Analyisi	Poster	Thur, May 26	9:00-12:00	ANP	3	P	Systems Analysis
Vogel	John	Plug Power	Oral	Thur, May 26	10:50 AM	FC	47	C	Stationary Power Systems
Wait	Mark	Air Products	Poster	Wed, May 25	9:00-12:00	TVP	7	P	Refueling Tech. Dev. & Demo.

Wang	Michael	ANL	Poster	Thur, May 26	9:00-12:00	ANP	7	P	Systems Analysis
Wang	Jim	Sandia Nat. Labs	Oral	Mon, May 23	2:25 PM	ST	2	B	Metal Hydrides
Wang	Jim	Sandia Nat. Labs	Poster	Tues, May 24	6:30-8:30	STP	15	P	Metal Hydrides
				Mon, May 23	4-7 PM				
Wang	Jim	Sandia Nat. Labs	Poster	Tues, May 24	6:30-8:30	STP	62	P	Metal Hydrides
				Mon, May 23	4-7 PM				
Wegrzyn	Jim	Brookhaven NL	Poster	Tues, May 24	6:30-7:30	STP	16	P	Metal Hydrides
				Mon, May 23	4-7 PM				
Weidner	John	U of S. Carolina	Poster	Wed, May 25	1:30-5:00	PDP	56	P	Hi-Temp Thermochemical
Weil	Scott	PNNL	Poster	Mon, May 23	1:45-5:00	FCP	13	P	Bipolar Plates
Weimer	Alan	U of Colorado	Poster	Mon, May 23	1:45-5:00	PDP	44	P	Hi-Temp Thermochemical
Weiner	Steven	PNNL	Oral	Thur, May 26	11:30 AM	SA	6	B	Safety, Codes & Stans.
Weisberg	Andrew	LLNL	Poster	Wed, May 25	9:00-1:00	STP	1	P	New Mat'l's & Concepts
Wells	Brian	Polyfuel, Inc.	Oral	Wed, May 25	11:35 AM	FC	33	C	Auxiliary/Portable Power
White	Ralph	U. of S. Carolina	Oral	Tues, May 24	11:15 AM	ST	9	B	New Mat'l's & Concepts
Whyatt	Greg	PNNL	Poster	Tues, May 24	9:00-12:00	FCP	26	P	Fuel Processing
Williamson	Paul	U. of Montana	Oral	Thur, May 26	8:30 AM	ED	4	A	Education
Wilson	Mahlon	LANL	Oral	Mon, May 23	3:55 PM	FC	5	C	MEAs
Wilson	Dane	ORNL	Poster	Wed, May 25	1:30-5:00	PDP	20	P	DOE Nuclear Energy
Wipke	Keith	NREL	Oral	Wed, May 25	2:50 PM	TV	7	B	Systems Analysis
Woodbury	Neal	Arizona State U.	Poster	Mon, May 23	1:45-5:00	PDP	38	P	Photoelectrochemical
Wu	Ying	Millennium Cell	Oral	Tues, May 24	2:15 PM	ST	12	B	Chemical Hydrides
Wu	Ying	Millennium Cell	Poster	Tues, May 24	6:30-7:30	STP	10	P	Chemical Hydrides
				Mon, May 23	4-7 PM				
Wu	Yue	U of N. Carolina	Poster	Tues, May 24	6:30-7:30	STP	41	P	Carbon Materials
				Mon, May 23	4-7 PM				
Xiang	Xiao-Dong	Intematix Corp.	Poster	Tues, May 24	6:30-7:30	STP	12	P	Chemical Hydrides
				Mon, May 23	4-7 PM				
Xiang	Xiao-Dong	Intematix Corp.	Poster	Tues, May 24	7:30-8:30	STP	29	P	Metal Hydrides
				Mon, May 23	4-7 PM				
Xu	Liwei	Midwest Optoelectronic	Poster	Mon, May 23	1:45-5:00	PDP	35	P	Photoelectrochemical
Yaghi	Omar	U of Michigan	Poster	Tues, May 24	6:30-7:30	STP	39	P	Carbon Materials
				Mon, May 23	4-7 PM				
Yaghi	Omar	U of Michigan	Poster	Wed, May 25	9:00-1:00	STP	52	P	New Mat'l's & Concepts
Yakobson	Boris	Rice University	Poster	Tues, May 24	7:30-8:30	STP	38	P	Carbon Materials
				Mon, May 23	4-7 PM				
Yang	Ralph	U of Michigan	Poster	Tues, May 24	7:30-8:30	STP	40	P	Carbon Materials
				Mon, May 23	4-7 PM				
Yee	David	Catalytica	Poster	Tues, May 24	9:00-12:00	FCP	15	P	Fuel Processing
Zawodzinski	Tom	Case West. Res. Un.	Oral	Mon, May 23	4:20 PM	FC	6	C	Membranes & MEAs
Zelenay	Piotr	LANL	Oral	Wed, May 25	1:15 PM	FC	34	C	Auxiliary/Portable Power
Zhao	J.-C.	GE	Poster	Tues, May 24	6:30-7:30	STP	27	P	Metal Hydrides
				Mon, May 23	4-7 PM				
Zidan	Ragaiy	Savannah River NL	Poster	Tues, May 24	7:30-8:30	STP	20	P	Metal Hydrides
				Mon, May 23	4-7 PM				
Zidan	Ragaiy	Savannah River NL	Poster	Wed, May 25	9:00-1:00	STP	58	P	Metal Hydrides