

2006 Hydrogen Program Annual Review Block Schedule

05/11/06

Time	Tuesday, May 16			Wednesday, May 17			Thursday, May 18			Friday, May 19		
	Session A Salons V&VI	Session B Salon IV	Session C Salon III	Session A Salons V&VI	Session B Salon IV	Session C Salon III	Session A Salons V&VI	Session B Salon IV	Session C Salon III	Session A Salons V&VI	Session B Salon IV	Session C Salon III
8:00 AM	<b>Plenary Session</b>				ST			ST			BES/ST	
				P&D	ST	FC	AN	ST	FC	TV	BES/ST	S,C&S
				P&D	ST	FC	AN	ST	FC	TV	BES/ST	S,C&S
				P&D	ST	FC	AN	ST	FC	TV	BES/ST	S,C&S
				Break			Break			Break		
				P&D	ST	FC	AN	ST	FC	TV	BES/ST	S,C&S
12:00 PM	Lunch (12:00-1:15) Speaker: Christy Cooper - H2 Education Survey Results			Lunch (12:00-1:15) Speaker: Graham Pugh, IPHE Secretariat; Awards Presentation			Lunch (12:00-1:15) Speaker: Keith Wipke - Learning Demo Produces First Public Results			TV	BES/ST	
1:15 PM	P&D	ST	FC	P&D	ST	FC	AN	ST	FC			
	P&D	ST	FC	P&D	ST	FC	AN	ST	FC			
	P&D	ST	FC	P&D	ST	FC	TV	ST	FC			
	P&D	ST	FC	P&D	ST	FC	TV	ST	FC			
	Break			Break			Break					
	P&D	ST	FC	ED	ST	FC	TV	ST	FC			
	P&D	ST	FC	ED	ST	FC	TV	ST	FC			
	P&D	ST	FC	ED	ST	FC	TV	ST	FC			
	P&D	BES/ST	FC	ED	BES/ST	FC	TV	ST	FC			
6:00 PM	Poster Session 1 Salons I & II, 6-8 PM			Poster Session 2/Networking Event, Ronald Reagan Center, 6:30-8:30 PM			Poster Session 3 Salons I & II, 6-8 PM					

<b>KEY</b>	<b>P&amp;D</b>	Production and Delivery	<b>ED</b>	Education
	<b>ST</b>	Storage	<b>S,C&amp;S</b>	Safety, Codes and Standards
	<b>FC</b>	Fuel Cells	<b>AN</b>	Analysis
	<b>TV</b>	Technology Validation	<b>BES/ST</b>	Basic Energy Sciences/Storage

## **2006 Hydrogen Program Annual Review Plenary Schedule**

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05/11/06

- 8:30 Welcome and Introductions by Steven Chalk, DOE Hydrogen Program Manager
- 8:40 Keynote Speaker: Mr. Andy Karsner, Assistant Secretary

### **Intensive Technology Reviews: Session I**

- 9:00 Storage: Dr. Sunita Satyapal
- 9:20 Fuel Cells: Ms. Valri Lightner
- 9:40 Discussion Panel: Dr. Sunita Satyapal, Ms. Valri Lightner, and Dr. Tim Fitzsimmons
  
- 10:00 Break

### **Intensive Technology Reviews: Session II**

- 10:15 Coal-based hydrogen: Mr. Lowell Miller
- 10:25 Nuclear-based hydrogen: Mr. Carl Sink
- 10:35 Hydrogen from distributed natural gas & renewables: Mr. Patrick Davis
- 10:45 Delivery: Mr. Mark Paster
- 10:55 Discussion Panel: Mr. Lowell Miller, Mr. Carl Sink, Mr. Patrick Davis, Mr. Peter Devlin, Mr. Mark Paster, and Dr. Tim Fitzsimmons

### **Session III**

- 11:10 Carbon capture and sequestration technology: Mr. Sean Plasynski
- 11:25 FutureGen update: Mr. Joseph Giove III
- 11:40 European hydrogen update: Dr. Bill Borthwick, European Commission
  
- 12:00 Lunch (Grand Ballroom) 
  
- 1:15 Technical Sessions Begin

## Session A - 2006 Hydrogen Program Annual Review Oral Presentations (Salons V&VI)

TUESDAY, MAY 16

Schedule as of: 05/11/06

Number	Time	Presenter	Organization	TDM	Proj. Off.	Title	Sub-Program Category
	<b>1:15 PM</b>	<b>Patrick Davis</b>	<b>DOE</b>			<b>Production and Delivery Sub-Program Overview</b>	
PD 1	1:30 PM	Sandy Thomas	H2Gen Inno. Inc.	Anderson	Elam	Low-Cost Hydrogen Distributed Production Systems	Distributed Production
PD 2	2:00 PM	Satish Tamhankar	BOC Group, Inc.	Anderson	Elam	Integrated Hydrogen Production, Purification & Compression System	Distributed Production
PD 3	2:30 PM	Ke Liu	GE Global Res.	Anderson	Elam	Integrated Short Contact Time Hydrogen Generator (SCPO)	Distributed Production
PD 4	3:00 PM	Randy Cortright	Virent Energy Sys.	Paster	Elam	Hydrogen Generation from Biomass-Derived Carbohydrates via Aqueous-Phase Reforming Process	Distributed Production
	<b>3:30 PM</b>	<b>Break</b>					
PD 5	3:50 PM	Bob Evans	NREL	Paster	NA	Distributed Bio-Oil Reforming	Distributed Production
PD 6	4:20 PM	Eric Miller	U of Nevada	R. Garland	Hooker	Photoelectrochemical Hydrogen Production: UNLV-SHGR	Photoelectrochemical
PD 7	4:50 PM	Ben Kroposki	NREL	R. Garland	NA	Renewable Electrolysis Integrated System Development and Testing	Electrolysis
PD 8	5:20 PM	Richard Bourgeois	GE Global Res.	R. Garland	Bakke	Advanced Alkaline Electrolysis	Electrolysis

WEDNESDAY, MAY 17

Schedule as of: 05/11/06

Number	Time	Presenter	Organization	TDM	Proj. Off.	Title	Sub-Program Category
PD 9	8:30 AM	Samir Ibrahim	Teledyne	R. Garland	Gruber	Alkaline, High Pressure Electrolysis	Electrolysis
PD 10	9:00 AM	Alan Weimer	U of Colorado	Paster	Hooker	Development of Solar-powered Thermochemical Production of Hydrogen from Water	Hi-Temp Thermochemical
PD 11	9:30 AM	Bruce Kelly	Nexant Inc.	Paster	Gruber	Hydrogen Delivery Infrastructure Options Analysis	Hydrogen Delivery
	<b>10:00 AM</b>	<b>Break</b>					
PD 12	10:30 AM	Rod Judkins	ORNL	Cicero	Tennant	Scale-Up of Microporous Inorganic Hydrogen-Separation	Hydrogen from Coal
PD 13	11:00 AM	Paul Grimmer	Eltron Research Inc.	Cicero	Bose	Scale-up of Hydrogen Transport Membranes for IGCC and FutureGen Plants	Hydrogen from Coal
PD 14	11:30 AM	James Arps	SwRI	Cicero	Bose	Cost-Effective Method for Producing Self-Supporting Pd Alloy Membrane for Use in the Efficient Production of Coal-Derived Hydrogen	Hydrogen from Coal
	<b>12:00 PM</b>	<b>Lunch</b>					
PD 15	1:15 PM	Paul Pickard	SNL/INL/GA	Sink	NA	Sulfur-Iodine Thermochemical Cycle	Nuclear Hydrogen Initiative
PD 16	1:45 PM	Richard Doctor	ANL	Sink	NA	Evaluation of a Continuous Calcium-Bromine Thermochemical	Nuclear Hydrogen Initiative
PD 17	2:15 PM	Steve Herring	INL/ANL/Ceramatec	Sink	NA	Laboratory-Scale High-Temperature Electrolysis System	Nuclear Hydrogen Initiative
PD 18	2:45 PM	Steve Sherman	INL	Sink	NA	Nuclear Reactor/Hydrogen Process Interface	Nuclear Hydrogen Initiative
	<b>3:15 PM</b>	<b>Break</b>					
	<b>3:35 PM</b>	<b>Christy Cooper</b>	<b>DOE</b>			<b>Education Sub-Program Overview</b>	
ED 1	3:45 PM	Barbara Nagle	UC Berkeley	Cooper	Gruber	Hydrogen Technology and Energy Curriculum (HyTEC)	Education
ED 2	4:15 PM	Mary Spruill	NEED	Cooper	Gruber	H2 Educate!	Education
ED 3	4:45 PM	Bruce Kinzey	PNNL	Cooper	NA	Hydrogen Safety Education and Training for Emergency	Education
ED 4	5:15 PM	Henry Gentenaar	The Media Network	Cooper	NA	Increasing "H2IQ": A Public Information Program	Education

**Session A - 2006 Hydrogen Program Annual Review Oral Presentations (Salons V&VI) (Continued)**

**THURSDAY, MAY 18**

Schedule as of: 05/11/06

Number	Time	Presenter	Organization	TDM	Proj. Off.	Title	Sub-Program Category
<b>8:15 AM Fred Joseck DOE Systems Analysis Sub-Program Overview</b>							
AN 1	8:30 AM	Brian D. James	Directed Techs.	Joseck	Gruber	Hydrogen Production Infrastructure Options Analysis	Systems Analysis
AN 2	9:00 AM	Harry Vidas	EEA	Joseck	Gruber	Impact of Hydrogen Production on U.S. Energy Markets	Systems Analysis
AN 3	9:30 AM	George Tolley	RCF, Inc.	Joseck	Gruber	Analysis of the Hydrogen Production and Delivery Infrastructure as a Complex Adaptive System	Systems Analysis
<b>10:00 AM Break</b>							
AN 4	10:30 AM	Keith Parks	NREL	Joseck	NA	WinDS-H2 Model and Analysis	Systems Analysis
AN 5	11:00 AM	Mark Ruth	NREL	Joseck	NA	Macro-System Model	Systems Analysis
AN 6	11:30 AM	Margo Melendez	NREL	Joseck	NA	Geographically Based Hydrogen Demand & Infrastructure	Systems Analysis
<b>12:00 PM Lunch</b>							
AN 7	1:15 PM	Paul Leiby	ORNL	Joseck	NA	Hydrogen Transition Modeling and Analysis: HYTRANS v. 1.0	Systems Analysis
AN 8	1:45 PM	Marylynn Placet	PNNL	Joseck	NA	Hydrogen Analysis Resource Center (HyARC)	Systems Analysis
<b>2:15 PM Sig Gronich DOE Technology Validation Sub-Program Overview</b>							
TV 1	2:25 PM	Rob Bacyinski	DTE Energy	Gronich	Mike Bedn	DTE Energy Hydrogen Technology Park	Power Parks Analysis
TV 2	2:55 PM	Andy Lutz	SNL	Gronich	NA	Power Parks System Simulation	Power Parks Analysis
<b>3:25 PM Break</b>							
TV 3	3:45 PM	Salvador Aceves	LLNL	Gronich	NA	Insulated Pressure Vessels for Vehicular Hydrogen Storage	Vehicle Demonstrations
TV 4	4:15 PM	Bill Liss	GTI	Gronich	Elam	Development of a Natural Gas-to-Hydrogen Fueling System	Distributed Production
TV 5	4:45 PM	David Guro	Air Products	Gronich	Elam	Development of a Turnkey H2 Refueling Station	Distributed Production
TV 6	5:15 PM	Greg Keenan	Air Products	Gronich	Hooker	Validation of an Integrated Hydrogen Energy Station	Power Parks Analysis

**FRIDAY, MAY 19**

Schedule as of: 05/11/06

Number	Time	Presenter	Organization	TDM	Proj. Off.	Title	Sub-Program Category
TV 7	8:30 AM	Roz Sell	General Motors	Gronich	Hooker	Hydrogen Vehicle and Infrastructure Demonstration and Validation	Vehicle Demonstrations
TV 8	8:50 AM	Klaus BonHoff	DaimlerChrysler	Gronich	Hooker	Controlled Hydrogen Fleet and Infrastructure Demonstration and Validation Project	Vehicle Demonstrations
TV 9	9:10 AM	Greg Frenette	Ford	Gronich	Hooker	Hydrogen Fuel Cell Vehicle & Infrastructure Demonstration Program Review	Vehicle Demonstrations
TV 10	9:30 AM	Dan Casey	Chevron	Gronich	Hooker	Controlled Hydrogen Fleet and Infrastructure Demonstration and Validation Project	Vehicle Demonstrations
<b>9:50 AM Break</b>							
TV 11	10:20 AM	Mark Pedersen	Air Products	Gronich	Alkire	California Hydrogen Infrastructure Project	Vehicle Demonstrations
TV 12	10:40 AM	Keith Wipke	NREL	Gronich	NA	Controlled Hydrogen Fleet & Infrastructure Analysis	Analysis

**Session B - 2006 Hydrogen Program Annual Review Oral Presentations (Salon IV)**
**TUESDAY, MAY 16**

Schedule as of: 05/11/06

Number	Time	Presenter	Organization	TDM	Proj. Off.	Title	Sub-Program Category
	1:15 PM	Sunita Satyapal	DOE			<b>Hydrogen Storage Sub-Program Overview</b>	
ST 1	1:25 PM	Bill Tumas	LANL	Ordaz	NA	DOE Chemical Hydrogen Storage Center of Excellence: Center Overview & Los Alamos National Laboratory Contributions	Chemical Hydrogen COE
ST 2	1:55 PM	Chris Aardahl	PNNL	Ordaz	NA	DOE Center of Excellence for Chemical Hydrogen Storage: PNNL Progress	Chemical Hydrogen COE
ST 3	2:25 PM	Larry Sneddon	U of Penn.	Ordaz	Alkire	Amineborane Hydrogen Storage: New Methods for Promoting Amineborane Dehydrogenation/Regeneration Reactions	Chemical Hydrogen COE
ST 4	2:55 PM	Michael Heinekey	U of Washington	Ordaz	Alkire	Solutions for Chemical Hydrogen Storage: Hydrogenation/ Dehydrogenation of B-N Bonds	Chemical Hydrogen COE
	3:25 PM	Break					
ST 5	3:45 PM	Fred Hawthorne	UCLA	Ordaz	Alkire	Chemical Hydrogen Storage Using Polyhedral Borane Anion Salts	Chemical Hydrogen COE
ST 6	4:15 PM	Suzanne Linehan	Rohm and Haas	Ordaz	Alkire	Novel Approaches to Hydrogen Storage: Conversion of Borates to Boron Hydrides	Chemical Hydrogen COE
ST 7	4:45 PM	Ying Wu	Millennium Cell	Ordaz	Alkire	Development of Advanced Chemical Hydrogen Storage and Generation System	Chemical Hydrogen COE
ST 8	5:15 PM	Xiao-Dong Xiang	Intematix	Ordaz	Alkire	Combinatorial Synthesis and High Throughput Screening of Effective Catalysts for Chemical Hydrides ALSO COVERS MH WORK	Chemical Hydrogen COE
BES/ST 1	5:45 PM	Larry Sneddon	U. of Pennsylvania	Fitzsimmons	NA	Chemical Hydrogen Storage in Ionic Liquid Media	Ionic Liquids
BES/ST 2	6:05 PM	Tom Autrey	PNNL	Fitzsimmons	NA	Control of Hydrogen Release and Uptake in Condensed Phases	Metal Hydrides

**WEDNESDAY, MAY 17**

Schedule as of: 05/11/06

Number	Time	Presenter	Organization	TDM	Proj. Off.	Title	Sub-Program Category
ST 9	8:00 AM	Alan Cooper	Air Products	Ordaz	Adams	Hydrogen Storage by Reversible Hydrogenation of Liquid-phase Hydrogen Carriers	Chemical Hydrogen-Independent Projects
ST 10	8:30 AM	Susanne Opalka	United Technologies Research Center	Read	Adams	Complex Hydride Compounds with Enhanced Hydrogen Storage Capacity	Metal Hydrides-Independent Projects
ST 11	9:00 AM	Greg Lewis	UOP LLC	Read	Adams	Discovery of Novel Complex Metal Hydrides for Hydrogen Storage through Molecular Modeling and Combinatorial Methods	Metal Hydrides-Independent Projects
ST 12	9:30 AM	Clemens Heske	UNLV	Read	Adams	Hydrogen Fuel Cells and Storage Technology Project at UNLV	Metal Hydrides-Independent Projects
	10:00 AM	Break					
ST 13	10:30 AM	Lennie Klebanoff	SNL	Read	NA	Metal Hydride Center of Excellence	Metal Hydride Center of Excellence
ST 14	11:30 AM	J.C. Zhao	General Electric	Read	Bakke	Lightweight Intermetallics for Hydrogen Storage	Metal Hydride Center of Excellence
	12:00 PM	Lunch					
ST 15	1:15 PM	Jason Graetz	BNL	Read	NA	Synthesis and Characterization of Alanes for Automotive Applications	Metal Hydride Center of Excellence
ST 16	1:45 PM	Greg Olson	HRL Laboratories	Read	Bakke	Thermodynamically Tuned Nanophase Materials for Reversible Hydrogen Storage	Metal Hydride Center of Excellence
ST 17	2:15 PM	Bob Bowman	Jet Propulsion Laboratory	Read	NA	Development and Evaluation of Advanced Hydride Systems for Reversible Hydrogen Storage	Metal Hydride Center of Excellence
ST 18	2:45 PM	Ian Robertson	U of Illinois	Read	Bakke	Metal Hydride-Based Hydrogen Storage	Metal Hydride Center of Excellence
	3:15 PM	Break					

**Session B - 2006 Hydrogen Program Annual Review Oral Presentations (Salon IV) (Continued)**

**WEDNESDAY, MAY 17 (Continued)**

Schedule as of: 05/11/06

Number	Time	Presenter	Organization	TDM	Proj. Off.	Title	Sub-Program Category
ST 19	3:35 PM	Rajesh Ahluwalia	ANL	Satyapal	NA	System Level Analysis of Hydrogen Storage Options	Storage Analysis
ST 20	4:05 PM	Steve Lasher	TIAX	Satyapal	Alkire	Analyses of Hydrogen Storage Materials and On-Board Systems	Storage Analysis
ST 21	4:35 PM	Jack Fischer	U of Penn./Drexel Univ.	Read	Adams	Carbide-Derived Carbons with Turnable Porosity Optimized for Hydrogen Storage	New Materials/Concepts
ST 22	5:05 PM	Omar Yaghi	UCLA/University of Michigan	Read	Adams	Hydrogen storage in Metal-Organic Frameworks	New Materials/Concepts
BES/ST 3	5:35 PM	Jack Fischer	U. of Pennsylvania	Fitzsimmons	NA	From fundamental understanding to predicting new nanomaterials for high capacity hydrogen storage and fuel cell technologies	New Materials/Concepts
BES/ST 4	5:55 PM	Omar Yaghi	UCLA	Fitzsimmons	NA	Metal-Organic Frameworks for Highly Selective Separations	New Materials/Concepts

**THURSDAY, MAY 18**

Schedule as of: 05/11/06

Number	Time	Presenter	Organization	TDM	Proj. Off.	Title	Sub-Program Category
ST 23	8:00 AM	Mike Heben	NREL	Satyapal	NA	Carbon Center of Excellence and NREL's Research	Carbon Center of Excellence
ST 24	9:00 AM	Alan Cooper	Air Products	Satyapal	Adams	Enabling Discovery of Materials With A Higher Heat of H2 Adsorption	Carbon Center of Excellence
ST 25	9:30 AM	Dan Neumann	NIST	Satyapal	NA	Neutron Characterization in support of the Carbon and Metal Hydride Centers of Excellence	Carbon Center of Excellence
	10:00 AM	Break					
ST 26	10:30 AM	James Tour	Rice U.	Satyapal	Adams	Cloning Single Wall Carbon Nanotubes for Hydrogen Storage	Carbon Center of Excellence
ST 27	11:00 AM	Peter Eklund	Penn State	Satyapal	Adams	Advanced Boron and Metal loaded High Porosity Carbons	Carbon Center of Excellence
ST 28	11:30 AM	Ralph Yang	U of Michigan	Satyapal	Adams	Hydrogen Storage by Spillover	Carbon Center of Excellence
	12:00 PM	Lunch					
	1:15 PM			Satyapal		Storage Theory Session	

**FRIDAY, MAY 19**

Schedule as of: 05/11/06

Number	Time	Presenter	Organization	TDM	Proj. Off.	Title	Sub-Program Category
BES/ST 5	8:00 AM	Millie Dresselhaus	MIT	Fitzsimmons	NA	Addressing Grand Challenges Through Advanced Materials	
BES/ST 6	8:25 AM	Peter Sutter	BNL	Fitzsimmons	NA	Atomistic Transport Mechanisms in Reversible Complex Metal Hydrides	
BES/ST 7	8:50 AM	William Yelon	U. Missouri	Fitzsimmons	NA	In-Situ Neutron Diffraction Studies of Novel Hydrogen Storage Materials	
BES/ST 8	9:15 AM	Mark Conradi	WUSTL	Fitzsimmons	NA	In-Situ NMR Studies of Hydrogen Storage Systems	
BES/ST 9	9:40 AM	Gang Chen	MIT	Fitzsimmons	NA	High Throughput Screening of Nanostructured Hydrogen Storage Materials	
	10:05 AM	Break					
BES/ST 10	10:25 AM	Vitalij Pecharsky	Ames	Fitzsimmons	NA	Complex Hydrides -- A New Frontier for Future Energy Applications	
BES/ST 11	10:50 AM	Dendy Sloan	Colorado School of Mines	Fitzsimmons	NA	Molecular Hydrogen Storage in Novel Binary Clathrate Hydrates at Near-Ambient Temperatures and Pressures	
BES/ST 12	11:15 AM	Nidia Gallego	ORNL	Fitzsimmons	NA	Atomistic Mechanisms of Metal-Assisted Hydrogen Storage in Nanostructured Carbon	
BES/ST 13	11:40 AM	Jeff Long	LBNL	Fitzsimmons	NA	A Synergistic Approach to the Development of New Classes of Hydrogen Storage Materials	

**Session C - 2006 Hydrogen Program Annual Review Oral Presentations (Salon III)**
**TUESDAY, MAY 16**

Schedule as of: 05/11/06

Number	Time	Presenter	Organization	TDM	Proj. Off.	Title	Sub-Program Category
	1:15 PM	Nancy Garland	DOE			<b>Fuel Cells Sub-Program Overview</b>	
FC 1	1:30 PM	Debbie Myers	ANL	Garland	NA	High-Temperature Polymer Electrolyte Membranes	Membranes
FC 2	2:00 PM	Rhonda Staudt	Plug Power	Epping	Tyler	Development of Polybenzimidazole-based High Temperature Membrane and Electrode Assemblies for Stationary Applications	Membranes
FC 3	2:30 PM	Yu Seung Kim	LANL	Garland	NA	Non-Nafion Membrane Electrode Assemblies	Membranes
FC 4	3:00 PM	John Turner	NREL	Garland	NA	Advanced Fuel Cell Membranes Based on Heteropolyacids	Membranes
	3:30 PM	Break					
FC 5	3:50 PM	Gonzalo Escobedo	Dupont	Manheim	Peterson	Enabling Commercial PEM Fuel Cells with Breakthrough Lifetime Improvements	Membranes
FC 6	4:20 PM	Scott Gaboury	Arkema Chemicals	Manheim	Tyler	Development of a Low-cost, Durable Membrane and MEA for Stationary and Mobile Fuel Cell Applications	Membranes
FC 7	4:50 PM	Christopher Cornelius	SNL	Garland	NA	Hydrocarbon Membrane	Membranes
FC 8	5:20 PM	Mike Hicks	3M	Epping	Tyler	MEA and Stack Durability for PEM Fuel Cells	Membranes

**WEDNESDAY, MAY 17**

Schedule as of: 05/11/06

Number	Time	Presenter	Organization	TDM	Proj. Off.	Title	Sub-Program Category
FC 9	8:30 AM	Radoslav Adzic	BNL	Garland	NA	Low Pt Loading Fuel Cell Electrocatalysts	Catalysts
FC 10	9:00 AM	Phil Ross	LBNL	Garland	NA	New Electrocatalysts for Fuel Cells	Catalysts
FC 11	9:30 AM	Stephen Campbell	Ballard	Ho	Peterson	Development of transition metal/ chalcogen based cathode catalysts for PEM fuel cells	Catalysts
	10:00 AM	Break					
FC 12	10:30 AM	Radoslav Atanasoski	3M	Ho	Peterson	Novel Approach to Non-Precious Metal Catalysts	Catalysts
FC 13	11:00 AM	Branko N. Popov	U of So. Carolina	Ho	Tyler	Novel Non-Precious Metals for PEMFC: Catalyst Selection Through Molecular Modeling and Durability Studies	Catalysts
FC 14	11:30 AM	Piotr Zelenay	LANL	Garland	NA	Non-Platinum Cathode Catalysts	Catalysts
	12:00 PM	Lunch					
FC 15	1:15 PM	Karen Swider-Lyons	NRL	Garland	NA	Low-Platinum Catalysts for Oxygen Reduction at PEMFC Cathodes	Catalysts
FC 16	1:45 PM	Paolina Atanassova	Superior MicroPowders	Manheim	Tyler	Development of High-Performance, Low-Pt Cathodes Containing New Catalysts and Layer Structures	Catalysts
FC 17	2:15 PM	Xiaoping Wang	ANL	Garland	NA	Electrode Stability	Catalysts
FC 18	2:45 PM	Yu-Min Tsou	E-TEK	Manheim	Tyler	Integrated Manufacturing for Advanced MEAs	MEAs
	3:15 PM	Break					
FC 19	3:45 PM	Mark Debe	3M	Manheim	Peterson	Advanced MEAs for Enhanced Operating Conditions, Amenable to High Volume Manufacture	MEAs
FC 20	4:15 PM	Lesia Protsailo	UTC	Manheim	Tyler	Development of High Temperature Membranes and Improved Cathode Catalysts for PEM Fuel Cells	MEAs
FC 21	4:45 PM	Mahlon Wilson	LANL	Garland	NA	Electrocatalyst Supports and Electrode Structures	MEAs
FC 22	5:15 PM	Bryan Pivovar	LANL	Garland	NA	Fundamental Science for Performance, Cost and Durability	Analysis/Characterization

Session C - 2006 Hydrogen Program Annual Review Oral Presentations (Salon III) (Continued)

THURSDAY, MAY 18

Schedule as of: 05/11/06

Number	Time	Presenter	Organization	TDM	Proj. Off.	Title	Sub-Program Category
FC 23	8:30 AM	Rajesh Ahluwalia	ANL	Garland	NA	Fuel Cell Systems Analysis	Analysis/Characterization
FC 24	9:00 AM	Fernando Garzon	LANL	Garland	NA	Effect of Fuel and Air Impurities on Fuel Cell Performance	Analysis/Characterization
FC 25	9:30 AM	Jim Boncella	LANL	Garland	NA	High Temperature/Low Humidity Polymer Electrolytes Derived from Ionic Liquids	Membranes
	10:00 AM	Break					
FC 26	10:30 AM	Muhammad Arif	NIST	Garland	NA	Neutron Imaging Study of the Water Transport in Operating Fuel Cells	Analysis/Characterization
FC 27	11:00 AM	Karren More	ORNL	Garland	NA	Microstructural Characterization Of PEM Fuel Cell MEAs	Analysis/Characterization
FC 28	11:30 AM	Rodney Borup	LANL	Garland	NA	PEM Fuel Cell Durability	Analysis/Characterization
	12:00 PM	Lunch					
FC 29	1:15 PM	John Newman	LBNL	Garland	NA	Investigating Failure in Polymer-Electrolyte Fuel Cells	Analysis/Characterization
FC 30	1:45 PM	Rangachary Mukundan	LANL	Garland	NA	Sub-Freezing Fuel Cell Effects	Analysis/Characterization
FC 31	2:15 PM	Daniel Rodriguez	Plug Power	Epping	Tyler	Back-up/Peak-Shaving Fuel Cells	Stationary
FC 32	2:45 PM	Harry J. Stone	Battelle	Epping	Peterson	Market Opportunity Assessment for Direct Hydrogen PEM Fuel Cells in Transition Markets	Stationary
	3:15 PM	Break					
FC 33	3:45 PM	David Haack	Porvair Corp.	Ho	Tyler	Scale-Up of Carbon/Carbon Bipolar Plates	Bipolar Plates
FC 34	4:15 PM	Peter Tortorelli	ORNL	Garland	NA	Cost-Effective Surface Modification For Metallic Bipolar Plates	Bipolar Plates
FC 35	4:45 PM	Stephen Grot	Ion Power, Inc.	Anderson	Tyler	Platinum Recycling Technology Development	Recycling
FC 36	5:15 PM	Larry Shore	Engelhard	Anderson	Peterson	Platinum Group Metal Recycling Technology Development	Recycling

FRIDAY, MAY 19

Schedule as of: 05/11/06

Number	Time	Presenter	Organization	TDM	Proj. Off.	Title	Sub-Program Category
	8:15 AM	Antonio Ruiz				Hydrogen Codes and Standards Sub-Program Overview	
SA 1	8:30 AM	Jim Ohi	NREL	Davis	NA	Hydrogen Codes and Standards	Safety, Codes & Stans.
SA 2	9:00 AM	Chris Moen	SNL	Davis	NA	Research and Development for Hydrogen Safety, Codes and Standards	Safety, Codes & Stans.
SA 3	9:30 AM	Cathy Padro	LANL	Davis	NA	International Projects: Global Technical Regulations	Safety, Codes & Stans.
	10:00 AM	Break					
SA 4	10:30 AM	Bruce Kinzey	PNNL	Davis	NA	H2 Incident Reporting and Best Practices Database	Safety, Codes & Stans.
SA 5	11:00 AM	Steven Weiner	PNNL	Davis	NA	Hydrogen Safety Review Panel	Safety, Codes & Stans.

**Tuesday Poster Session - 2006 Hydrogen Program Annual Review (Salons I&II, 6-8 PM)**
**Production and Delivery Posters, Tuesday May 16**

Schedule as of: 05/11/06

Number	Presenter	Organization	TDM	Proj. Off.	Title	Sub-Program Category
PDP 1	Ke Liu	GE Energy	Anderson	Elam	Autothermal Cyclic Reforming Based Hydrogen Generating System	Distributed Production
PDP 2	Cecelia Cropley	Giner Electrochemical	R. Garland	Gruber	Low-Cost, High-Pressure Hydrogen Generator	Electrolysis
PDP 3	Subodh K. Das	Secat, Inc.	Paster	Gruber	Materials Solutions for Hydrogen Delivery in Pipelines	Hydrogen Delivery
PDP 4	Maria Ghirardi	NREL	R. Garland	NA	Biological Systems for Hydrogen Photoproduction	Biological Production
PDP 5	Tim Aaron	Praxair	Anderson	Elam	Low Cost Hydrogen Production Platform	Distributed Production
PDP 6	Andres Marquez	Ohio University	R. Garland	Peterson	Adapting Planar Solid Oxide Fuel Cells for Distributed Power	Production
PDP 7	Umit Ozkan	Ohio State U	Anderson	Gruber	Investigation of Bio-ethanol Steam Reforming over cobalt based catalysts	Distributed Production
PDP 8	Jerry Y.S. Lin	U of Cincinnati	Anderson	Elam	Zeolite Membrane Reactor for Water-Gas-Shift Reaction for Hydrogen Production	Separations
PDP 9	Paul KT Liu	Media & Process Tech.	Anderson	Elam	Carbon Molecular Sieve Membrane as Reactor for Water Gas Shift Reaction	Separations
PDP 10	David Lynch	Startech Environmental	Paster	Gruber	Startech Hydrogen Production	Biomass Reforming
PDP 11	Tasios Melis	UC Berkeley	R. Garland	Elam	Maximizing Light Utilization Efficiency & Hydrogen Production in Microalgal Cultures	Biological Production
PDP 12	Liwei Xu	Midwest Optoelectronics	R. Garland	Elam	Critical Research for Cost-effective Photoelectrochemical Production of Hydrogen	Photoelectrochemical
PDP 13	Neal Woodbury	Arizona State U	R. Garland	Elam	Combinatorial Development of Water Splitting Catalysts Based on the Oxygen Evolving Complex of Photosystem II	Photoelectrochemical
PDP 14	John Turner	NREL	R. Garland	NA	Photoelectrochemical Water Systems for H <sub>2</sub> Production	Photoelectrochemical
PDP 15	Alan Weimer	U of Colorado	Paster	Gruber	Fundamentals of a Solar-thermal Mn <sub>2</sub> O <sub>3</sub> /MnO Thermochemical Cycle to Split Water	Hi-Temp Thermochemical
PDP 16	Petros Sofronis	U of Illinois	Paster	Gruber	Hydrogen Embrittlement of Pipeline Steels: Causes & Remediation	Hydrogen Delivery
PDP 17	Linda Eslin	Concurrent Tech. Corp	Paster	Gruber	Hydrogen Regional Infrastructure Program in Pennsylvania	Hydrogen Delivery
PDP 18	Michael Martin	Edison Materials Tech Center	Devlin	Gruber	Developing Improved Materials to Support the Hydrogen Economy	Cross-Cutting
PDP 19	Bill Liss	GTI	Paster	Elam	Forecourt Storage and Compression Options	Compressed/Liquid
PDP 21	Michele Lewis	ANL	Sink	NA	Evaluation of Alternative Thermochemical Cycles	Nuclear Energy Initiative
PDP 22	Tony Hechanova	UNLV	Sink	NA	UNLV Research Foundation High Temperature Heat Exchanger Development	Nuclear Energy Initiative
PDP 23	Brian Bischoff	ORNL	Sink	NA	Membrane Applications for Nuclear Hydrogen Production Processes	Nuclear Energy Initiative
PDP 24	Dane Wilson	ORNL	Sink	NA	Materials for Nuclear Hydrogen Production Processes	Nuclear Energy Initiative
PDP 25	Bill Summers	SRS	Sink	NA	Hybrid Sulfur Thermochemical Process Development	Nuclear Energy Initiative
PDP 26	Thomas Vanderspurt	United Technologies Corp	Cicero		Advanced Water Gas Shift Membrane Reactor	Hydrogen from Coal
PDP 27	Zhijiang Li	Aspen Products Group	Cicero		Robust Low-Cost Water-Gas Shift Membrane Reactor for High-Purity Hydrogen Production from Coal-Derived Syngas	Hydrogen from Coal
PDP 28	Thomas Barton	Western Research Institute	Cicero		The Integration of a Structural Water Gas Shift Catalyst with a Vanadium Alloy Hydrogen Transport Device	Hydrogen from Coal
PDP 29	Gerald Huffman	U of Kentucky Consortium	Cicero		Production and Storage of Hydrogen from Coal Using C1 Chemistry	Hydrogen from Coal
PDP 30	Scott Hopkins	Pall Corp.	Anderson	Elam	High-Performance, Durable, Palladium-Alloy Membrane for Hydrogen Separation & Purification	Separations
PDP 31	Tom Maloney	Northern Power Sys.	R. Garland		VERmont Renewable Hydrogen Fueling System	Electrolysis

**Tuesday Poster Session - 2006 Hydrogen Program Annual Review (Salons I&II, 6-8 PM) (Continued)**

**Production and Delivery Posters (Con't), Tuesday May 16**

Schedule as of: 05/11/06

Number	Presenter	Organization	TDM	Proj. Off.	Title	Sub-Program Category
PDP 33	Greg Tao	Materials and Systems Research	R. Garland		A Reversible Planar Solid Oxide Fuel-Fed Electrolysis Cell and Solid Oxide Fuel Cell for Hydrogen and Electricity Production Operating on Natural Gas/Biogas	Electrolysis
PDP 34	Nguyen Minh	GE HPGS	R. Garland		High Performance Flexible Reversible Solid Oxide Fuel Cell	Electrolysis
PDP 35	Xunming Deng	U of Toledo	R. Garland		Production of Hydrogen for Clean and Renewable Sources of Energy for Fuel Cell Vehicles	Photoelectrochemical
PDP 36	Daniel Graves	Nisource Energy Tech.	Devlin		Solid Oxide Fuel Cell Carbon Sequestration	Production
PDP 37	Yogi Goswami	U of South Florida	Ordaz		Production, Fuel Cell, and Delivery Research	Production

**Fuel Cells Posters, Tuesday, May 16**

Schedule as of: 05/11/06

Number	Presenter	Organization	TDM	Proj. Off.	Title	Sub-Program Category
FCP 1	Joe Mausar	Chemsultants	Devlin	Peterson	Center for Intelligent Fuel Cell Materials Design	Membranes
FCP 2	Morton Litt	Case Western Reserve University	Epping	Adams	Poly(p-phenylene Sulfonic Acid)s with Frozen-in Free Volume for use in High Temperature Fuel Cells	Membranes
FCP 3	Jimmy Mays	U of Tennessee	Epping	Tyler	Poly(cyclohexadiene)-Based Polymer Electrolyte Membranes for Fuel Cell Applications	Membranes
FCP 5	James Fenton	U of Central Florida	Garland	Peterson	Lead Research and Development Activity for DOE's High Temperature, Low Relative Humidity Membrane Program	Membranes
FCP 6	Dominic Gervasio	Arizona State	Garland	Gruber	Protic Salt Polymer Membranes: High-Temperature Water-Free Proton-Conducting Membranes	Membranes
FCP 7	Andrew Herring	Colorado School of Mines	Garland	Peterson	Novel Approaches to Immobilized Heteropoly Acid (HPA) Systems for High Temperature, Low Relative Humidity Polymer-Type Membranes	Membranes
FCP 9	Tommy Rockward	LANL	Garland	NA	Component Benchmarking	Analysis/Characterization
FCP 10	Ludwig Lipp	FuelCell Energy, Inc.	Ho	Tyler	High Temperature Membrane With Humidification-Independent Cluster Structure	Membranes
FCP 11	Joyce Hung	General Electric	Ho	Peterson	Design and Development of High-Performance Polymer Fuel Cell Membranes	Membranes
FCP 12	Han Liu	Giner Inc.	Ho	NA	Dimensionally Stable High Performance Membrane	Membranes
FCP 13	Lee Spangler	Montana State	Manheim	Elam	Montana PEM Membrane Degradation Study	Membranes
FCP 15	Stephen Creager	Clemson	Manheim	Tyler	Fluoroalkylphosphonic-acid-based proton conductors	Membranes
FCP 16	Cortney Mittelsteadt	Giner Electrochemical Systems	Manheim	Gruber	Dimensionally Stable High Temperature Membranes	Membranes
FCP 17	Serguei Lvov	Penn State	Manheim	Adams	New Proton Conductive Composite Materials with Co-continuous Phases Using Functionalized and Crosslinkable TFE/VDF Fluoropolymers	Membranes
FCP 19	Robert Moore	U of So. Mississippi	Manheim	Peterson	Characterization of PEMFC Membrane Durability	Membranes

## Wednesday Poster Session - 2006 Hydrogen Program Annual Review (Ronald Reagan Center, 6:30-8:30 PM)

### Systems Analysis Posters, Wednesday May 17

Schedule as of: 05/11/06

Number	Presenter	Organization	TDM	Proj. Off.	Title	Sub-Program Category
ANP 2	Stephen Lasher	TIAX	Joseck	NA	Impact of Renewables on Hydrogen Transition Analysis	Systems Analysis
ANP 3	Joan Ogden	UC Davis	Joseck	NA	Hydrogen Systems Analysis: Validation of "idealized city" models for H2 delivery in urban areas, with real-city data	Systems Analysis

### Technology Validation Posters, Wednesday May 17

Schedule as of: 05/11/06

Number	Presenter	Organization	TDM	Proj. Off.	Title	Sub-Program Category
TVP 1	Richard Rocheleau	Hawaii Natural Energy Inst.	Gronich	Bakke	Hawaii Hydrogen Center for Development and Deployment of Distributed Energy Systems	Power Parks Analysis
TVP 2	Raymond Hobbs	Pinnacle	Gronich	Dempsey	Hydrogen Power Park - Business Opportunities Concept Project	Power Parks Analysis
TVP 3	Todd Carlson	Air Products	Gronich	Passarella	Novel Compression and Fueling Apparatus to Meet Hydrogen Vehicle Range Requirements	Refueling Tech. Dev. & Demo.
TVP 4	Kofi Bota	Clark Atlanta Univ.	Gronich	Alkire	Hydrogen from Biomass for Urban Transportation	Power Parks Analysis
TVP 5	Jim Henry	City of Chattanooga	Gronich	Bakke	Chattanooga Fuel Cell Demonstration Project	Power Parks Analysis
TVP 6	Dave McLean	NextEnergy	Gronich	Alkire	NextEnergy Microgrid and Hydrogen Fueling Facility	H2/Fuel Cell Demo/Analysis
TVP 7	Leslie Eudy	NREL	Garbak	NA	Technology Validation: Fuel Cell Bus Evaluations	Systems Analysis
TVP 8	Robert Boehm	UNLV	Gronich	Hooker	Hydrogen Filling Station	Refueling Tech. Dev. & Demo.
TVP 10	Arnold Miller	Vehicle Projects LLC	Gronich	Alkire	Fuel Cell Powered Underground Mine Loader Vehicle	Vehicle Demonstrations
TVP 12	Ed Kiczek	Air Products	Gronich	Hooker	R&D of a PEM Fuel Cell, Hydrogen Reformer, and Vehicle Refueling Facility (Las Vegas Energy Park)	Refueling Tech. Dev. & Demo.

### Education Posters, Wednesday May 17

Schedule as of: 05/11/06

Number	Presenter	Organization	TDM	Proj. Off.	Title	Sub-Program Category
EDP 1	Howard Dillman	Lansing Comm. College	Cooper	Bakke	Hydrogen Education and Outreach	Education
EDP 2	John Griffin	Nicholls State Un.	Cooper	Bakke	Shared Technology Transfer Project	Education
EDP 3	Paul Williamson	U of Montana	Cooper	Bakke	Montana Hydrogen Futures Project	Education

**Wednesday Poster Session - 2006 Hydrogen Program Annual Review (Ronald Reagan Center, 6:30-8:30 PM) (Continued)**

**Fuel Cells Posters, Wednesday, May 17**

Schedule as of: 05/11/06

Number	Presenter	Organization	TDM	Proj. Off.	Title	Sub-Program Category
FCP 4	Peter Pintauro	Case Western Reserve University	Epping	Adams	NanoCapillary Network Proton Conducting Membranes for High Temperature Hydrogen/Air Fuel Cells	Membranes
FCP 8	John Kerr	LBNL	Garland	NA	New Polyelectrolyte Materials for High Temperature Fuel Cells	Membranes
FCP 18	James McGrath	Virginia Tech	Manheim	Adams	Advanced Materials for Proton Exchange Membranes	Membranes
FCP 20	Mark Schneider	Del. Co.Electric Co-op	Epping	Tyler	Residential Fuel Cell Demonstration by the Delaware County Electric Cooperative, Inc.	Stationary Power Systems
FCP 21	Jeremy Meyers	UTC Power	Epping	Gruber	Fuel Cell Freeze/Cold Start Program	Analysis/Characterization
FCP 23	Dennis Papadias	ANL	Garland	NA	Sub-Freezing Start-up of a Fuel Cell	Analysis/Characterization
FCP 24	Ira Bloom	ANL	Garland	NA	Fuel Cell Testing	Analysis/Characterization
FCP 25	John Turner	NREL	Garland	NA	Corrosion Protection of Metallic Bipolar Plates for Fuel Cells	Bipolar Plates
FCP 26	Scott Weil	PNNL	Garland	NA	Development of Low-Cost, Clad Metal Bipolar Plates for PEM Fuel Cells	Bipolar Plates
FCP 27	S. Narayanan	JPL	Garland	NA	Advanced Catalysts for Fuel Cells	Portable Power
FCP 28	Debbie Myers	ANL	Garland	NA	Impurity Effects on Membrane-Electrode Assembly Components	Analysis/Characterization
FCP 29	Xiaoping Wang	ANL	Garland	NA	Non-Platinum Electrocatalysts	Analysis/Characterization
FCP 30	Keith Kepler	Farasis Energy	Ho	NA	Novel, Combinatorial Method for Developing Cathode Catalysts for Fuel Cells	Catalysts
FCP 31	Eugene Smotkin	NuVant Systems	Ho	NA	Improved Fuel Cell Cathode Catalysts Using Combinatorial Methods	Catalysts
FCP 32	John Van Zee	U of So. Carolina	Ho	NA	University of South Carolina Fuel Cell Design Project	Catalysts
FCP 34	Satish Mohapatra	Advanced Fluids Tech.	Ho	NA	Complex Coolant Fluid for PEM Fuel Cell Systems	BOP
FCP 35	Robert Sievers	MTI Micro Fuel Cells	Ho	Tyler	Direct Methanol Fuel Cell Prototype Demonstration for Consumer Electronics Applications	Portable Power
FCP 36	Eric Carlson	TIAX	Ho	Gruber	Direct Hydrogen PEMFC Manufacturing Cost Estimation for Automotive	Analysis/Characterization
FCP 37	Brian James	DTI	Ho	Gruber	Mass Production Cost Estimation for Direct H2 PEM Fuel Cell System	Analysis/Characterization
FCP 38	Michael Bortner	Nanosonic, Inc.	Ho	NA	Economical High Performance Thermoplastic Composite Bipolar Plates	Bipolar Plates
FCP 39	Brian Wells	Polyfuel, Inc.	Ho	Tyler	DMFC Power Supply for All-Day True-Wireless Mobile Computing	Auxiliary/Portable Power
FCP 40	Joel Christian	OSRAM	Lightner	Tyler	Tungsten Cathode Catalyst for PEM Cells	Catalysts
FCP 41	Steven Chuang	University of Akron	Manheim	Tyler	Development of a kW Prototype Coal-based Fuel Cell	Analysis/Characterization
FCP 42	Mohammad Alam	U of So. Alabama	Epping	Bakke	Smart Energy Management and Control of Fuel Cell Powered Applications	Stationary Power Systems

**Cross-Cutting Project Posters, Wednesday, May 17**

Schedule as of: 05/11/06

Number	Presenter	Organization	TDM	Proj. Off.	Title	Sub-Program Category
CCP 1	Chuck Ryan	Natl Center for Manf.Sci.	Milliken	Adams	Advanced Manufacturing Technologies for Renewable Energy Applications	New Mat's & Concepts
CCP 2	David Haberman & Dan Cicero	DOE - NETL; IF, LLC	Cicero	Haberman	Enabling Hydrogen Transitions - NETL	

## Thursday Poster Session - 2006 Hydrogen Program Annual Review (Salons I&II, 6-8 PM)

### Storage Sub-Program Posters, Thursday May 18

Schedule as of: 05/11/06

Number	Presenter	Organization	TDM	Proj. Off.	Title	Sub-Program Category
STP 1	Dan Mosher	UTRC	Read	Adams	High Density Hydrogen Storage System Demonstration Using NaAlH <sub>4</sub> Complex Compound Hydrides	Metal Hydrides-Independent Projects
STP 2	Leon Shaw	U of Connecticut	Read	Alkire	Effects and Mechanisms of Mechanical Activation on Hydrogen Sorption/Desorption of Nanoscale Lithium Nitrides	Metal Hydrides-Independent Projects
STP 3	Karl Johnson	U of Pittsburgh	Read	Bakke	First-Principles Modeling of Hydrogen Storage in Metal Hydride Systems	Metal Hydride Center of Excellence
STP 4	Don Anton	Savannah River National Lab	Read	NA	Hydrogen Storage Materials and Systems Development	Metal Hydride Center of Excellence
STP 5	Bruce Clemens	Stanford U	Read	Bakke	Thermodynamically Tuned Nanophase Materials for Reversible Hydrogen Storage: Structure & Kinetics of Nanoparticle and Model System Materials	Metal Hydride Center of Excellence
STP 6	Craig Jensen	U of Hawaii	Read	Bakke	Fundamental Studies of Advanced High-Capacity, Reversible Metal Hydrides	Metal Hydride Center of Excellence
STP 7	Guanghai Zhu	Intematix	Read	Bakke	High Throughput Combinatorial Chemistry Development of Complex Hydrides	Metal Hydride Center of Excellence
STP 8	Channing Ahn	California Institute of Tech	Read	Bakke	Synthesis of Nanophase Materials for Thermodynamically Tuned Reversible Hydrogen Storage	Metal Hydride Center of Excellence
STP 9	Dhanesh Chandra	U of Nevada, Reno	Read	Bakke	Effect of Trace Elements on Long-Term Cycling and Aging Properties of Complex Hydrides for Hydrogen Storage	Metal Hydride Center of Excellence
STP 10	Zak Fang	U of Utah	Read	Bakke	Synthesis and Discovery of Nanocrystalline Reversible Hydrides	Metal Hydride Center of Excellence
STP 11	Lennie Klebanoff	Sandia-Livermore	Read	NA	Metal Hydride Center of Excellence	Metal Hydride Center of Excellence
STP 12	Gilbert Brown	Oak Ridge National Lab	Read	Bakke	Hydrogen Storage Research at Oak Ridge National Laboratory	Metal Hydride Center of Excellence
STP 13	Chinbay Fan	Gas Technology Institute	Read	Adams	Electron-Charged Graphite-Based Hydrogen Storage Material	Carbon-Independent Projects
STP 14	Israel Cabasso	State University of	Read	Alkire	Nanostructured Activated Carbon for Hydrogen Storage	Carbon-Independent Projects
STP 15	Alan MacDiarmid	U of Penn.	Satyapal	Adams	Conducting Polymers as New Materials for Hydrogen Storage	Carbon Center of Excellence
STP 16	Channing Ahn	California Institute of Tech	Satyapal	Adams	Enhanced Hydrogen Dipole Physisorption	Carbon Center of Excellence
STP 17	Boris Yakobson	Rice U	Satyapal	Adams	Theoretical Models of H <sub>2</sub> -SWNT Systems for Hydrogen Storage and Optimization of SWNT Production	Carbon Center of Excellence
STP 18	Yue Wu	U of North Carolina	Satyapal	Adams	Characterization of Hydrogen Adsorption by NMR	Carbon Center of Excellence
STP 19	Jie Liu	Duke U	Satyapal	Adams	Synthesis of Small Diameter Carbon Nanotubes and Mesoporous Carbon Materials for Hydrogen Storage	Carbon Center of Excellence
STP 20	Lin Simpson	NREL	Satyapal	NA	Overview of the DOE Carbon Center of Excellence	Carbon Center of Excellence
STP 21	Ted Baumann	LLNL	Satyapal	NA	Metal-doped Carbon Aerogels for Hydrogen Storage	Carbon Center of Excellence
STP 22	Ying Wu	Millenium Cell, Inc.	Ordaz	Alkire	Process for the Regeneration of Sodium Borate to Sodium Borohydride	Chemical Hydrogen-Independent Projects

**Thursday Poster Session - 2006 Hydrogen Program Annual Review (Salons I&II, 6-8 PM) (Continued)**

**Storage Sub-Program Posters, Thursday May 18**

Schedule as of: 05/11/06

Number	Presenter	Organization	TDM	Proj. Off.	Title	Sub-Program Category
STP 23	Andrew McClaine	Safe Hydrogen, LLC	Ordaz	Adams	Chemical Hydride Slurry for Hydrogen Production and Storage	Chemical Hydrogen-Independent Projects
STP 24	Ashok Damle	Research Triangle Institute	Ordaz	Alkire	Development of Regenerable, High-Capacity Boron Nitrogen Hydrides For Hydrogen Storage	Chemical Hydrogen-Independent Projects
STP 25	Digby Macdonald	Penn State	Ordaz	Alkire	Electrochemical Hydrogen Storage Systems	Chemical Hydrogen Center of Excellence
STP 26	Philip Power	UC Davis	Ordaz	Alkire	Chemical Hydrogen Storage using Ultra-High Surface Area Main Group Elements	Chemical Hydrogen Center of Excellence
STP 27	Anthony Arduengo	U of Alabama	Ordaz	Alkire	Main Group Element and Organic Chemistry for Hydrogen Storage and Activation	Chemical Hydrogen Center of Excellence
STP 28	Clint Lane	Northern Arizona U.	Ordaz	Alkire	Safety Analysis and Applied Research on the Use of Borane-Amines for Hydrogen Storage	Chemical Hydrogen Center of Excellence
STP 29	Bill Tumas	LANL	Ordaz	Alkire	Overview of the DOE Chemical Hydrogen Center of Excellence	Chemical Hydrogen Center of Excellence
STP 31	Tony Cheetham	UC Santa Barbara	Read	Alkire	Hydrogen Storage Materials with Binding Intermediate Between Physisorption and Chemisorption	New Materials-Independent Projects
STP 32	Viktor Struzhkin	Carnegie Institute	Ordaz	Alkire	Inorganic Clathrates for Hydrogen Storage	New Materials-Independent Projects
STP 33	Jerry Atwood	U of Missouri	Ordaz	Alkire	Unexpected Gas Sorption Displayed by Organic Clathrates	New Materials-Independent Projects
STP 34	Michael Miller	SwRI	Satyapal	Adams	National Testing Laboratory for Solid-State Hydrogen Storage Technologies	Testing and Analysis-Independent Projects
STP 35	Jui Ko	Quantum Technologies, Inc.	Satyapal	Alkire	Low Cost, High Efficiency, High Pressure Hydrogen Storage	Compressed and Cryogenic Tanks-Independent Projects
STP 36	Andrew Weisberg	LLNL	Satyapal	NA	Advanced Concepts for Containment of Hydrogen and Hydrogen	Compressed and Cryogenic Tanks-
STP 37	Jim Ritter	U of South Carolina	Read	Bakke	Clean Energy Research Project: Advanced Metal Hydrides	Cross-Cutting Projects
STP 38	Michael Matthews	U of South Carolina	Read	Bakke	Clean Energy Research: Project III: Hydrogen Storage Using Chemical Hydrides	Cross-Cutting Projects
STP 45	Ralph White	U of So. Carolina	Read	Bakke	Expanding Clean Energy Research and Education Program at the University of S. Carolina	Cross-Cutting Projects
STP 39	Wayne Britton	FST Energy	Read	Bakke	A Cassette Based System for Hydrogen Storage and Delivery	Cross-Cutting Projects
STP 40	Jay Gore	Purdue University	Read	Peterson	Purdue Hydrogen Technology Program	Cross-Cutting Projects
STP 41	Andrew Goudy	Delaware State University	Read	Alkire	Center for Hydrogen Storage Research at Delaware State University	Cross-Cutting Projects
STP 43	Lee Stefanakos	U of South Florida	Ordaz	Tyler	Hydrogen Storage Research	Cross-Cutting Projects
STP 44	Vidvuds Ozolins	UCLA	Read	Adams	First-Principles Computational Search for Reversible Room-Temperature Hydrides	Metal Hydrides-Independent Projects

**Thursday Poster Session - 2006 Hydrogen Program Annual Review (Salons I&II, 6-8 PM) (Continued)**

**Basic Energy Sciences/Storage Posters, Thursday May 18**

Schedule as of: 05/11/06

<b>Number</b>	<b>Presenter</b>	<b>Organization</b>	<b>TDM</b>	<b>Proj. Off.</b>	<b>Title</b>	<b>Sub-Program Category</b>
BES/ST 14	Ragaiy Zidan	Savannah River National Lab	Fitzsimmons	NA	Elucidation of Hydrogen Interaction Mechanisms with Metal-Doped Carbon Nanostructures	Basic Energy Sciences
BES/ST 15	Nidia Gallego	ORNL	Fitzsimmons	NA	Characterization of Carbon Nanostructures in Pd Containing	Basic Energy Sciences
BES/ST 16	Rachel Aga	ORNL	Fitzsimmons	NA	Theoretical Investigation of the Energetics of Hydrogen	Basic Energy Sciences
BES/ST 17	John Larese	ORNL	Fitzsimmons	NA	Neutron Scattering Aided Studies of the Design, Synthesis and Thermo-dynamics of molecular hydrogen adsorption materials	Basic Energy Sciences
BES/ST 18	Mei-Yin Chou	Georgia Institute of Technology	Fitzsimmons	NA	First-Principles Studies of Phase Stability and Reaction Dynamics in Complex Metal Hydrides	Basic Energy Sciences
BES/ST 19	W.B. Yelon	University of Missouri-Rolla	Fitzsimmons	NA	Crystal and electronic structures of LiNH <sub>2</sub> and related compounds	Basic Energy Sciences
BES/ST 20	Tabbatha Dobbins	Louisiana Tech University	Fitzsimmons	NA	Understanding the Role (and Controlling the Behavior) of Transition Metal Dopants in NaAlH <sub>4</sub> Systems	Basic Energy Sciences
BES/ST 21	Yi-Ping Zhao	University of Georgia	Fitzsimmons	NA	Integrated Nanoscale Metal Hydride – Catalyst Architectures for Hydrogen Storage	Basic Energy Sciences
BES/ST 22	Vijay John	Tulane University	Fitzsimmons	NA	The Molecular Design Basis for Hydrogen Storage in Clathrate Hydrates	Basic Energy Sciences
BES/ST 23	Qingfeng Ge	Southern Illinois University	Fitzsimmons	NA	First Principles Based Simulation of Hydrogen Interactions in Complex Hydrides	Basic Energy Sciences
BES/ST 24	Michael Trenary	University of	Fitzsimmons	NA	Dehydrogenation of Boron-Nanoclusters	Basic Energy Sciences
BES/ST 25	Mark Conradi	Washington	Fitzsimmons	NA	NMR Studies of Metal Hydrides: MgScH <sub>x</sub>	Basic Energy Sciences