| LIST OF PROJECTS NOT REVIEW | VED |
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| Project ID | Project Title | PI Name | Organization |
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| ARRA-04 | Advanced Direct Methanol Fuel Cell for Mobile Computing | Jim Fletcher | University of North Florida |
| ARRA-05 | Jadoo Power Fuel Cell Demonstration | Ken Vaughn | Jadoo Power |
| ARRA-12 | Demonstrating the Economic and Operational Viability of 72-Hour Hydrogen PEM Fuel Cell Systems to Support Emergency Communications on the Sprint - Nextel Network | Kevin Kenny | Sprint |
| BES-01 | Fluoropolymers, Electrolytes, Composites and Electrodes | Stephen Creager | Clemson University |
| BES-02 | Ab-initio Screening of Alloys for Hydrogen Purification Membranes | David Sholl | Georgia Institute of Technology |
| BES-03 | Theory, Modeling, and Simulation of Ion Transport in Ionomer Membranes | Philip Taylor | Case Western Reserve University |
| BES-04 | The Study of Proton Transport Using Reactive Molecular Dynamics | David Keffer | University of Tennessee |
| BES-05 | Surface-Directed Fabrication of Integrated Membrane-Electrode Interfaces | Kane Jennings | Vanderbilt University |
| BES-06 | Activity and Stability of Nanoscale Pt- based Catalysts | Yang Shao- Horn | Massachusetts Institute of Technology |
| BES-07 | Cathode Catalysis in Hydrogen/Oxygen Fuel Cells: Mechanism, New Materials, and Characterization | Andrew Gewirth | University of Illinois |
| BES-08 | Fundamental Studies of Electrocatalysis for Low Temperature Fuel Cell Catalysts | Nenad Markovic | ANL |
| BES-09 | Engineering Catalytic Nanoporous Metals for Reactions Important to the Hydrogen Economy | Jonah Erlebacher | Johns Hopkins University |
| BES-10 | Theoretical Insights Into Active and Durable Oxygen Reduction Catalysts | Matthew Neurock | University of Virginia |

| BES-11 | An in situ Electrode-Potential- Controlled Nuclear Magnetic Resonance Investigation of Sulfur-Poisoning Effect on Pt-Based Mono- and Bi-metallic Nanoscale Electrocatalysts | YuYe Tong | Georgetown University |
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| BES-12 | Investigation of the Oxygen Reduction Reaction Activity of Heteroatom- containing Carbon Nano-structures | Umit Ozkan | Ohio State University |
| BES-13 | In-Situ Studies of Active Sites and Mechanism for the Water-Gas Shift Reaction on Metal/Oxide Nanocatalysts | Jose Rodriguez | BNL |
| BES-14 | Bio-Inspired Molecular Catalysts for Hydrogen Oxidation and Hydrogen Production | Morris Bullock | PNNL |
| BES-15 | Structure/Composition/Function Relationships in Supported Nanoscale Catalysts for Hydrogen | Peter Stair | Northwestern University & ANL |
| BES-16 | Fundamentals of Hydroxide Conducting Systems for Fuel Cells and Electrolyzers | Bryan Pivovar | NREL |
| BES-17 | Transport Phenomena and Interfacial Kinetics in Planar Microfluidic Membraneless Fuel Cells | Hector Abruna | Cornell University |
| BES-18 | High Performance Nano-Crystalline Oxide Fuel Cell Materials | Thomas O. Mason | Northwestern University |
| BES-19 | Nanostructured, metal-modified oxide catalysts for steam reforming of methanol and the water-gas shift reactions | Maria Flytzani- Stephanopoulos | Tufts University |
| BES-20 | Strategies for Probing Nanometer-Scale Electrocatalysts: From Single Particles to Catalyst-Membrane Architectures | Carol Korzeniewski | Texas Tech University |
| BES-21 | Atomic-scale Design of a New Class of Alloy Catalysts for Reactions Involving Hydrogen: A Theoretical and Experimental Approach | Manos Mavrikakis | University of Wisconsin |
| BES-22 | Multiscale Tailoring of Highly Active and Stable Nanocomposite Catalysts for the Production of Clean Hydrogen Streams | Gotz Veser | University of Pittsburgh |
| BES-23 | Metal- and Metal Oxide-Supported Platinum Monolayer Electrocatalysts for Oxygen Reduction | Radoslav Adzic | BNL |

| BES-24 | Development and Mechanistic Characterization of Alloy Fuel Cell | Anders Nilsson | Stanford Linear Accelerator Laboratory |
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| BES-25 | Catalysts Metal dissolution mechanisms in Pt- based alloys: Ideas for advanced PEM cathode design | Perla Balbuena | Texas A&M University |
| BES-26 | Fundamental Studies of Electrocatalysis for Low Temperature Fuel Cell Catalysts (Poster of BES008 oral presentation) | Hoydoo You | ANL |
| BES-27 | Theoretical Studies of Water-Gas Shift Reaction on Metal-Oxide Catalysts | Ping Liu | BNL |
| BES-30 | Mechanism of Proton Transport in Proton Exchange Membranes: Insights from Computer Simulation | Greg Voth | University of Chicago |
| BES-31 | Porous and Glued Ultrathin Membranes | Stephen Regen | Lehigh University |
| BES-32 | The Development of Nano-Composite Electrodes for Solid Oxide Electrolyzers | Raymond Gorte | University of Pennsylvania |
| BES-33 | Charge Transfer, Transport, and Reactivity in Complex Molecular Environments: Theoretical Studies for the Hydrogen Fuel Initiative | Michel Dupuis | PNNL |
| BES-34 | Proton Conduction in Rare-earth Phosphates | Lutgard De Jonghe | LBNL |
| BES-35 | The Dielectric Response of Hydrated PFSA Membranes – Measurements with Single Post Dielectric Resonators | Stephen Paddison | University of Tennessee |
| ED-01 | Hydrogen Safety Training for First Responders | Steven Weiner | PNNL |
| ED-02 | Education for Emerging Fuel Cell Technologies | Carl Rivkin | NREL |
| ED-16 | Hydrogen Technology and Energy Curriculum (HyTEC) | Barbara Nagle | Lawrence Hall of Science at UC- Berkeley |
| ED-17 | H2 Educate! Hydrogen Education for Middle Schools | Mary Spruill | NEED |
| ED-18 | Hydrogen Knowledge and Opinions Assessment | Rick Schmoyer | ORNL |

| | Development of Micro-Structural | | |
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| FC-49 | Mitigation Strategies for PEM Fuel Cells: Morphological Simulations and Experimental Approaches | Silvia Wessel | Ballard |
| FC-53 | Low Cost, Durable Seals for PEM Fuel Cells | Jason Parsons | UTC Power |
| FC-54 | Transport Studies and Modeling in PEM Fuel Cells | Cortney Mittelsteadt | Giner Electrochemical Systems, LLC |
| FC-55 | Subfreezing Start/Stop Protocol for an Advanced Metallic Open-Flowfield Fuel Cell Stack | Amedeo Conti | Nuvera Fuel Cells |
| FC-56 | Visualization of Fuel Cell Water Transport and Performance Characterization Under Freezing Conditions | Satish Kandlikar | Rochester Inst. of Technology |
| FC-57 | 7C: Intergovernmental Stationary Fuel Cell System Demonstration | Richard Chartrand | Plug Power Inc. |
| FC-58 | Research & Development for Off-Road Fuel Cell Applications | Mike Hicks | IdaTech, LLC |
| FC-61 | Diesel Fueled SOFC System for Class 7/Class 8 On-Highway Truck Auxiliary Power | Dan Norrick | Cummins |
| FC-62 | Solid Oxide Fuel Cell Development for Auxiliary Power in Heavy Duty Vehicle Applications | Gary Blake | Delphi |
| FC-63 | Novel Materials for High Efficiency Direct Methanol Fuel Cells | Chris Roger | Arkema |
| FC-64 | New MEA Materials for Improved DMFC Performance, Durability, and Cost | Jim Fletcher | University of North Florida |
| FC-65 | The Effect of Airborne Contaminants on Fuel Cell Performance and Durability | Richard Rocheleau | University of Hawaii |
| FC-66 | Development of Thermal and Water Management System for PEM Fuel Cell | Zia Mirza | Honeywell |
| FC-67 | Materials and Modules for Low Cost, High Performance Fuel Cell Humidifiers | Will Johnson | W.L. Gore |
| FC-68 | Center for Fundamental and Applied Research in Nanostructured and Lightweight Materials | Michael Mullins | Michigan Technological University |

| FC-69 | Renewable and Logistics Fuels for Fuel Cells at the Colorado School of Mines | Neal Sullivan | Colorado School of Mines |
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| FC-70 | Development of Kilowatt-Scale Fuel Cell Technology | Steven Chuang | University of Akron |
| FC-71 | Alternative Fuel Cell Membranes for Energy Independence | Kenneth Mauritz | University of Southern Mississippi |
| FC-72 | Extended Durability Testing of an External Fuel Processor for SOFC | Mark Perna | Rolls Royce Fuel Cell Systems Inc. |
| FC-73 | Hydrogen Fuel Cell Development in Columbia (SC) | Kenneth Reifsnider | University of South Carolina |
| FC-74 | Martin County Hydrogen Fuel Cell Development | Jeffrey Bonner- Stewart | Martin County Economic Development Corporation |
| FC-75 | Fuel Cell Balance of Plant Reliability Testbed | Vern Sproat | Stark State College of Technology |
| PD-01 | Investigation of Reaction Networks and Active Sites in Bio-Ethanol Steam Reforming over Co-based Catalysts | Umit Ozkan | Ohio State University |
| PD-43 | Developing Improved Materials to Support the Hydrogen Economy | Michael Martin | Edison Materials Tech Center |
| PD-44 | Purdue Hydrogen Systems Laboratory | Jay Gore | Purdue University |
| PD-49 | H2 Permeability and Integrity of Steel Welds | Zhili Feng | ORNL |
| PD-50 | Coatings for Centrifugal Compression | George Fenske | ANL |
| PD-57 | Photoelectrochemical Hydrogen Production | Malay Mazumder | University of Arkansas Little Rock |
| PD-60 | Advanced Sealing Technology for Hydrogen Compressors | Hooshang Heshmat | Mohawk Innovative Technologies |
| PD-61 | Photochemical System for Hydrogen Generation | Alexander Parfenov | Physical Optics Corporation |
| PD-62 | Nanotube Array Photoelectrochemical Hydrogen Production | Rikard Wind | Synkera Technologies Inc. |

| PD-63 | Aqueous Phase Base-Facilitated Reforming (BFR) of Renewable Fuels | Brian James | Directed Technologies, Inc. |
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| PD-64 | Advanced PEM Based Hydrogen Home Refueling Appliance | Michael Pien | ElectroChem, Inc. |
| PD-65 | Unitized Design for Home Refueling Appliance for Hydrogen Generation to 5,000 psi | Timothy Norman | Giner, Inc. |
| PD-66 | Design, Optimization and Fabrication of a Home Hydrogen Fueling System | Brian Hennings | Lynntech |
| PD-67 | Hydrogen by Wire - Home Fueling System | Luke Dalton | Proton Energy Systems |
| PD-68 | Modeling Hydrogen Dispensing Options for Advanced Storage | Kurtis McKenney | TIAX, LLC |
| PD-69 | Development of a Hydrogen Home Fueling System | Greg Tao | Materials and Systems Research, Inc. |
| PD-70 | One Step Biomass Gas Reforming-Shift Separation Membrane Reactor | Mike Roberts | Gas Technology Institute |
| PD-71 | High Performance, Low Cost Hydrogen Generation from Renewable Energy | Katherine Ayers | Proton Energy Systems |
| PD-72 | Development of Hydrogen Selective Membranes/Modules as Reactors/Separators for Distributed Hydrogen Production | Paul Liu | Media and Process Technology Inc. |
| PD-73 | Zeolite Membrane Reactor for Water- Gas-Shift Reaction for Hydrogen Production | Jerry Y.S. Lin | Arizona State University |
| PD-74 | Rapid Low Loss Cryogenic H2 Refueling | Salvador Aceves | LLNL |
| PD-75 | Range Optimization for Fuel Cell Vehicles | Zhenhong Lin | ORNL |
| PD-76 | Photoelectrochemical Generation of Hydrogen from Water Using Visible Light Sensitive Ferro-Electric BiFeO3 and Semiconductor Nanotubes | Mano Misra | University of Nevada Reno |
| SCS-11 | Risk-Informed Separation Distances for H2 Facilities | Daniel Dedrick | SNL |
| ST-14 | Overview of the DOE Hydrogen Sorption Center of Excellence | Lin Simpson | NREL |

| ST-16 | Enhanced Hydrogen Dipole Physisorption: Henry's Law and Isosteric Heats in Microporous Sorbents | Channing Ahn | California Institute of Technology |
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| ST-17 | Single-Walled Carbon Nanohorns for Hydrogen Storage and Catalyst Supports | David Geohegan | ORNL |
| ST-20 | Neutron Characterization in Support of the Hydrogen Sorption Center of Excellence | Dan Neumann | NIST |
| ST-29 | 5-Year Review of Metal Hydride Center of Excellence | Lennie Klebanoff | SNL |
| ST-33 | Discovery and Development of Metal Hydrides for Reversible On-board Hydrogen Storage | Mark Allendorf | SNL |
| ST-34 | Aluminum Hydride Regeneration | Jason Graetz | BNL |
| ST-35 | Reversible Hydrogen Storage Materials - Structure, Chemistry, and Electronic Structure | Ian Robertson | University of Illinois |
| ST-36 | 2010 Overview and Wrapup: DOE Chemical Hydrogen Storage Center of Excellence | Kevin Ott | LANL |
| ST-39 | Amineborane-Based Chemical Hydrogen Storage | Larry Sneddon | University of Pennsylvania |
| ST-42 | Low-Cost Precursors to Novel Hydrogen Storage Materials | Suzanne Linehan | Dow Chemical Company |
| ST-43 | Ammonia Borane Regeneration and Market Analysis of Hydrogen Storage Materials | David Schubert | U.S. Borax |
| ST-52 | Best Practices for Characterizing Hydrogen Storage Properties of Materials | Karl Gross | H2 Technology Consulting, LLC |
| ST-56 | Solutions for Chemical Hydrogen Storage: Dehydrogenation of B-N and C-C Bonds | Karen Goldberg | University of Washington |
| ST-57 | Chemical Hydrogen Storage Using Ultra-High Surface Area Main Group Materials & The Development of Efficient Amine-Borane Regeneration Cycles | Philip Power | University of California Davis |
| ST-58 | Electrochemical Hydrogen Storage Systems | Digby Macdonald | Pennsylvania State University |

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| ST-59 | Chemical Hydrogen Storage Using Aluminum Ammonia-Borane Complexes | Fred Hawthorne | University of Missouri |
| ST-60 | Main Group Element and Organic Chemistry for Hydrogen Storage and Activation | David Dixon | University of Alabama |
| ST-61 | Thermodynamically Tuned Nanophase Materials for Reversible Hydrogen Storage: Structure and Kinetics of Nanoparticle and Model System Materials | Bruce Clemens | Stanford University |
| ST-62 | Discovery of H2 Storage Materials: LiMgN and Mg-Ti-H | Zak Fang | University of Utah |
| ST-63 | Electrochemical Reversible Formation of Alane | Ragaiy Zidan | SRNL |
| ST-64 | First-Principles Modeling of Hydrogen Storage in Metal Hydride Systems | Karl Johnson | University of Pittsburgh/ Georgia Institute of Technology |
| ST-65 | Thermodynamically Tuned Nanophase Materials for Reversible Hydrogen Storage | Ping Liu | HRL Laboratories |
| ST-66 | Catalyzed Nano-Framework Stabilized High Density Reversible Hydrogen Storage Systems | Xia Tang | UTRC |
| ST-67 | Neutron Characterization and Calphad in Support of the Metal Hydride Center of Excellence | Terry Udovic | NIST |
| ST-68 | Metal Borohydrides, Ammines, and Aluminum Hydrides as Hydrogen Storage Materials | Gilbert Brown | ORNL |
| ST-69 | Development and Evaluation of Advanced Hydride Systems for Reversible Hydrogen Storage | Joe Reiter | NASA JPL |
| ST-70 | Amide and Combined Amide/Borohydride Investigations | Don Anton | SRNL |
| ST-71 | Effect of Trace Elements on Long-Term Cycling/Aging Properties and Thermodynamic Studies of Complex Hydrides for Hydrogen Storage | Dhanesh Chandra | University of Nevada Reno |
| ST-72 | Synthesis of Nanophase Materials for Thermodynamically Tuned Reversible Hydrogen Storage | Channing Ahn | California Institute of Technology |
| ST-74 | Hydrogen Storage Materials with Binding Intermediate between Physisorption and Chemisorption | Juergen Eckert | University of California Santa Barbara |

| ST-75 | Optimization of Nano-Carbon Materials for Hydrogen Sorption | Boris Yakobson | Rice University |
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| ST-76 | Nanoengineered Graphene Scaffolds with Atom Substitution for H2 Adsorption | Jim Tour | Rice University |
| ST-77 | Carbon Aerogels for Hydrogen Storage | Ted Baumann | LLNL |
| ST-78 | Hydrogen Storage by Spillover | Ralph Yang | University of Michigan |
| ST-79 | Characterization of Hydrogen Adsorption by NMR | Yue Wu | University of North Carolina |
| ST-80 | Advanced Boron and Metal Loaded High Porosity Carbons | Mike Chung | Pennsylvania State University |
| ST-81 | Optimizing the Binding Energy of Hydrogen on Nanostructured Carbon Materials through Structure Control and Chemical Doping | Jie Liu | Duke University |
| ST-82 | Discovery of Materials with a Practical Heat of H2 Adsorption | Alan Cooper | Air Products |
| ST-83 | Development of Advanced Manufacturing Technologies for Low Cost Hydrogen Storage Vessels | Alex Ly | Quantum Fuel Systems Technologies Worldwide, Inc. |
| ST-84 | Purdue Hydrogen Systems Laboratory | Jay Gore | Purdue University |
| ST-85 | HGMS: Glasses and Nanocomposites for Hydrogen Storage | Kristina Lipinska-Kalita | University of Nevada Las Vegas |
| ST-86 | The H-Prize | Jeffrey Serfass | Hydrogen Education Foundation |
| TV-03 | Controlled Hydrogen Fleet and Infrastructure Demonstration and Validation Project | Mike Veenstra | Ford |
| TV-04 | Hydrogen to the Highways | Ron Grasman | Daimler |

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