List of Projects Presented but Not Reviewed

Project ID	Project Title	Principal Investigator Name	Organization
PD-038	Fermentation and Electrohydrogenic Approaches to Hydrogen Production	Pin-Ching Maness	National Renewable Energy Laboratory
PD-048	Electrochemical Hydrogen Compressor	Ludwig Lipp	FuelCell Energy, Inc.
PD-095	Improving Cyanobacterial Oxygen Tolerance Using CBS Hydrogenase for Hydrogen Production	Pin-Ching Maness	National Renewable Energy Laboratory
PD-098	Low-Noble-Metal-Content Catalysts/Electrodes for Hydrogen Production by Water Electrolysis	Katherine Ayers	Proton OnSite
PD-100	700 bar Hydrogen Dispenser Hose Reliability Improvement	Kevin Harrison	National Renewable Energy Laboratory
PD-118	New Metal Oxides for Efficient Hydrogen Production via Solar Water Splitting	Yanfa Yan	University of Toledo
PD-119	National Science Foundation/U.S. Department of Energy Solar Hydrogen Fuel: Engineering Surfaces, Interfaces, and Bulk Materials for Unassisted Solar Photoelectrochemical Water Splitting	Tom Jaramillo	Stanford University
PD-120	Accelerated Discovery of Advanced Redox Materials for Solar Thermal Water Splitting to Produce Renewable Hydrogen	Charles Musgrave	University of Colorado Boulder
PD-121	Tunable Photoanode-Photocathode-Catalyst Interface Systems for Efficient Solar Water Splitting	G. Charles Dismukes	Rutgers University
PD-122	Hydrogen Production from Continuous-Flow Bioelectrochemical Systems Treating Fermentation Wastewater	Bruce Logan	Pennsylvania State University
PD-123	High-Performance, Platinum-Group-Metal-Free Membrane Electrode Assemblies through Control of Interfacial Processes	Katherine Ayers	Proton OnSite
PD-124	Solid-Oxide-Based Electrolysis and Stack Technology with Ultra-High Electrolysis Current Density and Efficiency	Randy Petri	Versa Power Systems
PD-125	Tandem Particle-Slurry Batch Reactors for Solar Water Splitting	Shane Ardo	University of California, Irvine

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PD-126	Compressorless Hydrogen Refueling Station Using Thermal Compression	Ted Barnes	Gas Technology Institute
PD-127	Sweet Hydrogen: High-Yield Production of Hydrogen from Biomass Sugars Catalyzed by In Vitro Synthetic Biosystems	Y-H Percival Zhang	Virginia Tech
PD-128	2014–2016 H2 Refuel H-Prize	Jeff Serfass	Hydrogen Education Foundation
ST-007	Chemical Hydrogen Rate Modeling, Validation, and System Demonstration	Troy Semelsberger	Los Alamos National Laboratory
ST-009	Testing, Modeling, and Evaluation of Innovative Hydrogen Storage System Designs	Mei Cai	General Motors
ST-014	Hydrogen Sorbent Measurement Qualification and Characterization	Phil Parilla	National Renewable Energy Laboratory
ST-047	Development of Improved Composite Pressure Vessels for Hydrogen Storage	Norman Newhouse	Hexagon Lincoln
ST-067	Neutron Characterization in Support of the U.S. Department of Energy Hydrogen Storage Sub-Program	Terry Udovic	National Institute for Standards and Technology
ST-095	Hawaii Hydrogen Carriers: Low-Cost Metal Hydride Hydrogen Storage System for Forklift Applications (Small Business Innovation Research Phase II)	Craig Jensen	University of Hawaii
ST-103	Hydrogen Storage in Metal-Organic Frameworks	Jeffrey Long	Lawrence Berkeley National Laboratory
ST-104	Novel Carbon-Boron-Nitrogen-Containing Hydrogen Storage Materials	Shih-Yuan Liu	Boston College
ST-110	Optimizing the Cost and Performance of Composite Cylinders for Hydrogen Storage Using a Graded Construction (Small Business Innovation Research Phase II)	Andrea Haight	Composite Technology Development
ST-119	High-Capacity Hydrogen Storage Systems via Mechanochemistry	Vitalij Pecharsky	Ames Laboratory
ST-120	Design and Synthesis of Materials with High Capacities for Hydrogen Physisorption	Brent Fultz	California Institute of Technology

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ST-121	High-Capacity and Low-Cost Hydrogen-Storage Sorbents for Automotive Applications	Hong-Cai (Joe) Zhou	Texas A&M University
ST-122	Hydrogen Adsorbents with High Volumetric Density: New Materials and System Projections	Don Siegel	University of Michigan
ST-126	Conformable Hydrogen Storage Coil Reservoir	Erik Bigelow	Center for Transportation and the Environment
BES-001	Complex Hydrides – A New Frontier for Future Energy Applications	Vitalij Pecharsky	Ames Laboratory
BES-002	Elucidation of Hydrogen Interaction Mechanisms with Metal-Doped Carbon Nanostructures	Ragaiy Zidan	Savannah River National Laboratory
BES-003	Activation of Hydrogen under Ambient Conditions by Main Group Molecules	Philip Power	University of California, Davis
BES-004	Elucidation of Hydride Interaction Mechanisms with Carbon Nanostructures and the Formation of Novel Nanocomposites	Pura Jena	Virginia Commonwealth University
FC-049	Open-Source Performance and Durability Model: Consideration of Membrane Properties on Cathode Degradation	David Harvey	Ballard
FC-083	Optimal Stationary Fuel Cell Integration and Control	Genevieve Saur	National Renewable Energy Laboratory
FC-085	Synthesis and Characterization of Mixed-Conducting Corrosion-Resistant Oxide Supports	Vijay Ramani	Illinois Institute of Technology
FC-086	Development of Novel Non-Platinum-Group-Metal Electrocatalysts for Proton Exchange Membrane Fuel Cell Applications	Sanjeev Mukerjee	Northeastern University
FC-088	Development of Ultra-Low Doped-Platinum Cathode Catalysts for Polymer Electrolyte Membrane Fuel Cells	Branko Popov	University of South Carolina
FC-105	Novel Structured Metal Bipolar Plates for Low-Cost Manufacturing	C.H. Wang	TreadStone Technologies, Inc.
FC-117	Ionomer Dispersion Impact on Polymer Electrolyte Membrane Fuel Cell and Electrolyzer Durability	Hui Xu	Giner, Inc.
FC-128	Facilitated Direct Liquid Fuel Cells with High-Temperature Membrane Electrode Assemblies	Emory DeCastro	Advent Technologies, Inc.

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FC-129	Advanced Catalysts and Membrane Electrode Assemblies for Reversible Alkaline Membrane Fuel Cells	Hui Xu	Giner, Inc.
FC-130	Development of Non-Platinum-Group-Metal Catalysts for Hydrogen Oxidation Reaction in Alkaline Media	Alexey Serov	University of New Mexico
FC-131	New-Generation P+ Cation for High-Voltage Redox-Flow Batteries	Yushan Yan	University of Delaware
FC-132	Innovative Non-Platinum-Group-Metal Catalysts for High-Temperature Polymer Electrolyte Membrane Fuel Cells	Sanjeev Mukerjee	Northeastern University
FC-133	Non-Platinum-Group-Metal OER/ORR Catalysts for Alkaline Membrane Fuel Cells and Electrolyzers	Nemanja Danilovic	Proton Energy Systems
FC-134	Non-Precious-Metal Bifunctional Catalysts	Paul Matter	pH Matter, LLC
MN-012	Clean Energy Supply Chain and Manufacturing Competitiveness Analysis for Hydrogen and Fuel Cell Technologies	Pat Valente	Ohio Fuel Cell Coalition
MN-013	Fuel Cell and Hydrogen Opportunity Center	Alleyn Harned	Virginia Clean Cities at James Madison University
MN-014	U.S. Clean Energy Hydrogen and Fuel Cell Technologies: A Competiveness Analysis	Patrick Fullenkamp	GLWN – Westside Industrial Retention & Expansion Network
TV-016	Stationary Fuel Cell Evaluation	Genevieve Saur	National Renewable Energy Laboratory
TV-024	California State University, Los Angeles, Hydrogen Refueling Facility Performance Evaluation and Optimization	David Blekhman	California State University, Los Angeles
TV-031	Dynamic Modeling and Validation of Electrolyzers in Real-Time Grid Simulation	Robert Hovsapian Kevin Harrison	Idaho National Laboratory National Renewable Energy Laboratory
MT-018	Demonstration and Deployment of a Fuel Cell-Electric Refuse Truck for Waste Transportation	Abas Goodarzi	US Hybrid
ARPA-E-02	A Novel Intermediate-Temperature Fuel Cell Tailored for Efficient Utilization of Methane	Meilin Liu	Georgia Tech

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ARPA-E-03	Medium-Temperature Oxygen-Conducting Fuel Cell Based on a Novel Membrane Structure	Ashish Pattekar	PARC
ARPA-E-04	Nanocomposite Electrodes for a Solid Acid Fuel Cell Stack Operating on Reformate	Tom Zawodzinski	Oak Ridge National Laboratory
ARPA-E-05	Low-Temperature Solid Oxide Fuel Cells for Transformational Energy Conversion	Bryan Blackburn	Redox Power Systems
ARPA-E-07	Direct Hydrocarbon Fuel Cell-Battery Hybrid Electrochemical System	Masaru Tscuchiya	SiEnergy
ARPA-E-08	Fuel Cells with Dynamic Response Capability Based on Energy Storage Electrodes with Catalytic Function	Yunfeng Lu	University of California, Los Angeles
ARPA-E-09	A Novel Intermediate-Temperature Bifunctional Ceramic Fuel Cell Energy System	Kevin Huang	University of South Carolina
ARPA-E-10	Development of an Intermediate-Temperature Metal-Supported Proton-Conducting Solid Oxide Fuel Cell Stack	Dave Tew	United Technologies Research Center
ARPA-E-11	Intermediate-Temperature Hybrid Fuel Cell System for the Conversion of Natural Gas to Electricity and Liquid Fuels	Ted Krause	Argonne National Laboratory
ARPA-E-12	Dual Mode Intermediate-Temperature Fuel Cell: Liquid Fuels and Electricity	Carl Willman	FuelCell Energy
ARPA-E-14	Intermediate-Temperature Proton-Conducting Fuel Cells for Transportation Applications	Elango Elangovan	Ceramatec
ARPA-E-15	Methane to Methanol Fuel: A Low-Temperature Process	Chinbay Fan	Gas Technology Institute