

FISCAL YEAR 2019 H2@SCALE FUNDING OPPORTUNITY ANNOUNCEMENT

TEAMING PARTNER LIST

UPDATED MARCH 27, 2019

* By facilitating this Teaming Partner List, EERE does not endorse or otherwise evaluate the qualifications of the entities that self-identify themselves for placement on the Teaming Partner List.

Organization	Contact Name	Organization Type	Area of Technical Expertise	Description of Capabilities	Contact Information
NextEnergy	Tim Slusser	Non-profit	NextEnergy has expertise with the siting, installation, commissioning, and operation of distributed resources and energy systems for electrified mobility (DC fast, bi-directional EV charging, and hydrogen fueling). We have designed, installed, and commissioned a 5k psi hydrogen refueling station at our facility in Detroit. We have also managed a methanol-based reformer project for hydrogen generation as well as installed and commissioned EV charging stations up to 100kW.	Testing, project and research development, project management, business and ownership model development, stakeholder engagement (public and private), and consultation with AHJ for approval and operation.	Address: 461 Burroughs Detroit, MI 48202 Email: tims@nextenergy.org Phone: (313) 833-0100 x120
Ames Laboratory	Viktor Balema	DOE National Laboratory (FFRDC), academic, government	Materials for hydrogen storage and water splitting; materials and products development and scale up	- Synthesis of inorganic materials and metallic alloys, including wet and solid state chemistry, mechanochemistry, and thermal processing - Full suite of materials characterization techniques (Ames Laboratory's capabilities: https://www.ameslab.gov/dmse)	Address: 255 Spedding, 2416 Pammel Dr., Ames, IA 50011-3020 Email: vbalema@ameslab.gov Phone: (515) 294-8033

				<ul style="list-style-type: none"> - Laboratory-scale electrochemistry; testing of electrode performance - Advanced characterization of hydrogen absorption-desorption performance of materials as function of temperature and pressure - Scale up of inorganic and hybrid materials through Ames Laboratory's Materials Preparation Center (https://www.ameslab.gov/mpc) 	
GVD Corporation	Chris Thompson	Small business	Vacuum deposited polymer/oxide coatings, thin films, surface modification	<p>Development of vacuum deposited polymer films that are ideal for surface modification of polymer and elastomeric substrates. Our current product portfolio includes fluorocarbon materials with hydrophobic and superhydrophobic properties, flexible gas barrier materials, and ion conducting polymers with high thermal and hydrolytic stability. In DOE-supported research, GVD has developed a gas barrier coating, designed to limit ingress of hydrogen gas into and out of elastomeric seals for use in high temperature high pressure applications. GVD also has developed a lubricious coating that improve the wear rates of</p>	<p>Address: 45 Spinelli Pl. Cambridge, MA 02138 Email: cthompson@gvdcorp.com Phone: 617-661-0060, ext 136</p>

				rigid seals in hydrogen compression and dispensing systems.	
Purdue University	Shripad Revankar	Academic Institute, Non-Profit	Materials for water splitting- hydrogen generation; Materials for hydrogen storage, modeling, scale-up; Plant optimization	Synthesis of catalysts, materials and metallic alloys, including wet and solid state chemistry, and thermal processing; materials characterizations, testing facilities for electrochemical processes, electrodes and membranes, high pressure hydrogen absorption-desorption testing as function of temperature. Various advanced facilities at Purdue University including nano-technology centers; System modeling, scale-up and optimization methods	Address: 400 Central Drive Purdue University West Lafayette, In 47907 Email: shripad@purdue.edu Phone: 765-409-7829
Southwest Research Institute	Tim Allison	Non-profit	<ul style="list-style-type: none"> -Machinery development (including hydrogen compression and combustion) -Hydrogen storage -Fuel cell materials and assemblies -Separation membranes for hydrogen production -Codes and standards for hydrogen delivery -Electrochemical and solar to hydrogen generation -Solid state hydrogen carriers 	SwRI is an independent non-profit R&D institute focusing on applied R&D. We have existing hydrogen compression and combustion test loops and experience in designing, fabricating, and operating demonstration-scale and pilot-scale systems (kW-scale up to 10 MWe) for energy conversion.	Address: 6220 Culebra Rd, San Antonio TX 78238 Email: tim.allison@swri.org Phone: 210-522-3561
National Renewable Energy	Jennifer Kurtz	DOE National Laboratory (FFRDC)	NREL's hydrogen and fuel cell expertise includes dynamic control of electrolysis; integrated systems research with scalable hydrogen	NREL's hydrogen infrastructure research capabilities include a configurable platform for experiments ranging from	Address: 15013 Denver W Pkwy, Golden, CO 80401 Email: jennifer.kurtz@nrel.gov Phone: 303-275-4061

Laboratory (NREL)			production, delivery, compression, storage, and dispensing; highly accelerated reliability testing; component validation; safety and security; and data science and analysis (e.g., logistical, techno-economic, and station operational modeling efforts.)	individual component proof-of-concept to fully integrated, wholistic system controls and optimization. See https://www.nrel.gov/hydrogen/hitrf-animation.html for more detail.	
First Solar	Kevin Collins, Director – Systems Development	Manufacturer, Utility Scale PV Plant Developer/EPC and Operator	research and development of PV technology, PV plant design, electrical systems integration, grid integration, and plant controls	First Solar is a developer and manufacturer of CdTe PV modules that are distributed to global markets. First Solar also has vertical capabilities as a utility scale plant project developer, EPC, and plant operator.	Address: 200 Crossing Blvd., Bridgewater, NJ 08807 Email: kcollins@firstsolar.com Phone: 908-255-2665
Los Alamos National Laboratory	Rodney Borup	DOE National Laboratory (FFRDC)	Hydrogen Infrastructure, H2 fuel quality, Safety Codes and Standards, Hydrogen Production	Los Alamos National Laboratory has the following capabilities/technologies relevant to this topic: i) R&D100 award winning Hydrogen Safety Sensor, ii) hydrogen contaminant detector technology, iii) advanced anion exchange membranes for electrolysers, and iv) extensive analytical testing facilities.	Address: MS D429 Bikini Atoll Road Los Alamos, NM 87545 Email: borup@lanl.gov Phone: 505-695-4810
Gaia Energy Research Institute LLC	Whitney G. Colella, Ph.D., MBA	Economically Disadvantaged Women-Owned Small Business (EDW OSB)	advanced energy concepts; hydrogen and fuel cell systems; electrochemical systems; all types of renewable energy; energy economics; electricity system economics; all types of hydrogen production (high and low temperature electrolysis, photoelectrochemical, solar thermal, steam methane reforming, hydrogen co-production, etc.); all types of hydrogen	energy system modelling; thermodynamic / chemical engineering process plant analysis; techno-economic analyses (TEA), for example, for meeting R&D targets or making down-selection decisions in the R&D process; design for manufacture and assembly (DFMA); life cycle analysis (LCA);	Address: Arlington, VA, 22203 Email: wgc@gaia-energy-research-institute.com Phone: +1 (650) 283-2701 or +1 (434) 207-8536 (VoIP)

			compression (mechanical, electrochemical, etc.); hydrogen infrastructure; grid integration; optimal design and dynamic control strategies for novel energy technologies and distributed energy systems	assembling and leading successful technical teams	
Hawaii Natural Energy Institute (HNEI)	Mitch Ewan	University	Hydrogen Production, Storage, Dispensing, Fuel Cell Electric Buses, Hydrogen delivery using tube trailers, Codes & Standards, permitting,	HNEI has two hydrogen stations that can be used to test equipment	Address: 1680 East-West Road, POST 109, Honolulu, HI 96822 Email: ewan@hawaii.edu Phone: 808-956-2337 or 832-212-6129
Moran Innovation (formerly Isotherm Energy)	Matthew E. Moran	Small business (for profit)	Hydrogen power and propulsion systems development for NASA, DOD and private sector organizations for over 34 years (liquid, slush & gaseous). Systems engineering, analysis, modeling, design, prototyping, testing, implementation and deployment/launch.	Hydrogen energy storage and production architecture that enables custom system design. Intellectual property includes patents, patents pending, and proprietary system modeling software. For more information see: www.moraninnovation.com	Address: 1411 Rustic Bridge Dr, Kent, OH 44240 Email: matt@moraninnovation.com Phone: 330-321-2895
Mary Kay O'Connor Process Safety Center, Texas A&M University	Dr. Benjamin Wilhite	Academic institute	Safety and quantitative risk assessments through Preliminary Hazard Analysis (PHA), Hazards and Operability Analysis (HAZOP), Bow-Tie analysis etc., Consequence modelling, inherently safer design, Facility siting, Key contributors in fuel safety research (specifically through LNG medium & large-scale fire experiments)	Brayton fire training field to perform medium/large scale fire and explosion tests, Material & characterization facility at Texas A&M for membrane and catalyst material characterization, Access to HyRAM (for risk assessment of hydrogen-based facilities), FLACS and PHAST platforms for consequence assessment and Ansys-fluent for CFD modelling	Address: Jack E. Brown Building, Texas A&M University, 3122 TAMU College Station, TX 77843-3122 Email: benjaminwilhite@exchange.tamu.edu