

Teaming Partner List

Buildings Energy Efficiency Frontiers & Innovation Technologies (BENEFIT) – 2019

(DE-FOA-0002090)

5/9/2019

Organization Name (alphabetical)	Contact Information	Organization Type	Topic Area(s)	Area of Technical Expertise	Capabilities
Ames Laboratory	Julie Slaughter 128 Spedding Hall, 2416 Pammel Drive Iowa State University Ames, IA 50011 julies1@ameslab.gov 515-294-4720	FFRDC	Sub-topic 2a: Non-Vapor Compression Heating, Ventilation and Air Conditioning (HVAC) Technologies	Caloric materials and devices	Ames Lab researches and develops caloric materials and devices for refrigeration, air conditioning, and heat pumping applications. Capabilities include new caloric material development and characterization, regenerator design and fabrication, system and component modeling, model validation, proof-of-concept prototyping, and small-scale system fabrication and testing. Our team has expertise with magnetocaloric and elastocaloric technologies and experience with barocaloric and electrocaloric materials.
Dover Food Retail – Hillphoenix & Anthony Division	Michael May 2016 Gees Mill Rd Conyers, GA 30013 mmay@doverfoodretail.com 713-305-2484	Large Business	1a. Cybersecurity though Adaptive Building Controls 1b. Flexible Building Equipment Performance Verification 1c. Advanced Actuators 1d. Thermal Energy Storage Materials 1e. Embedded Energy Storage for Building Equipment 2a. Non Vapor Compression HVAC Technologies 2b. Fuel Driven Building Equipment	Commercial Refrigeration Equipment OEM Commercial Refrigeration Design, Development, Application, Verification & Validation	Design, Development, Application, Verification & Validation expertise for Commercial Refrigeration Equipment.
GE Research	Barbara Grossmann 1 Research Circle Niskayuna, NY 12309 Barb.Grossmann@ge.com 518-387-7364	Large Business	Sub-topic 3b: Quantum Dot Optical Down-Converters	Materials and reliability characterization of downconversion materials	GE Research (GER) has a suite of characterization capabilities to understand and optimize downconverter performance and capabilities in typical medium-power packages. We have developed accelerated reliability protocols for photostability, moisture stability, and thermal stability that have direct correlation to performance and reliability in medium-power 3030 packages. In addition, GER can provide quantitative assessment of QD-based efficacy improvements versus industry benchmarks with KSF/PFS red phosphors with YAG:Ce yellow-green phosphors and estimates of relative material usage. Finally, GER has a comprehensive suite of analytical and characterization capabilities, that can be integrated into understanding root causes for materials properties and correlating these root causes into processing and compositional parameters. These capabilities were all used to accelerate the implementation of the industry-standard K2SiF6:Mn4+ (PFS/KSF) red phosphor that is being used in LCD backlights, commercial lighting fixtures, LED replacements for fluorescent lamps, and LED replacements for incandescent lamps.

<p>OhmConnect</p>	<p>Lillian Mirviss 350 Townsend St., Suite 210 San Francisco, CA 94107 lillian@ohmconnect.com 415-606-2025</p>	<p>Small Business</p>	<p>Sub-topic 1b: Flexible Building Equipment Performance Verification</p>	<p>Residential demand response and home energy management software</p>	<p>OhmConnect is a residential demand response software platform that manages real-time demand response events through easy-to-use home appliances. OhmConnect has built a state-of-the-art customer-facing platform to coordinate residential utility customer DR events, #OhmHours, and each #OhmHour, users can respond by making behavioral changes, like turning off lights, as well as taking automated actions by connecting their smart devices (including WiFi thermostats, smart plugs, etc.) to the OhmConnect platform. OhmConnect is rich with gamified features, and it is constantly evolving with the requirements of the customers.</p> <p>The platform's web application (and mobile integrated website) allows users to sign up for OhmConnect's general service, take action, and be rewarded in a simple yet effective engagement mechanism. Users sign up via a streamlined process that allows them to connect their electric meter information through software protocols to OhmConnect. Then, users receive notifications of when to take an action. If they respond with energy reductions, they are rewarded. OhmConnect's demand response platform not only coordinates grid shedding events within homes, but as more devices are connected to the central hub, OhmConnect can intelligently work with home appliances to facilitate flexible load shifting.</p>
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