

FAR WEST & MID-CONTINENT REGIONAL MEETING



We will be starting shortly!



**FAR WEST & MID-CONTINENT
REGIONAL MEETING**

November 17 - 18, 2020 VIRTUAL



Awards Presentation - Far West

1:15 – 1:45 p.m. M.T.

Moderator

**David Nicholson, USDA Agricultural Research
Service**

Award-Winning Categories:

- Outstanding Commercialization Success
- Outstanding Partnership
- Outstanding Technology Development
- Technology Transfer Professional of the Year

**FAR WEST & MID-CONTINENT
REGIONAL MEETING**

Outstanding Commercialization Success

National Weather Service Alaska Field Office *“iGage River Level Sensor Commercialization”*



NATIONAL WEATHER SERVICE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

Crane Johnson, National Weather
Service Alaska Region River
Forecast Center



Derek Parks, NOAA Technology
Partnerships Office



National Weather Service Alaska Field Office *“iGage River Level Sensor Commercialization”*



iGage's Original Design



iGage Bridge Installation

**FAR WEST & MID-CONTINENT
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Outstanding Partnership

Lawrence Livermore National Laboratory *“Supplevent™ Emergency Ventilator”*

Dr. Jack Kotovsky, LLNL

Dr. Patrick Dempsey, LLNL

Genaro Mempin, LLNL



Dr. Sherif Gabriel, BioMedInnovations, LLC

Carrie DiMarzio, BioMedInnovations, LLC

Lawrence Livermore National Laboratory *“Supplevent™ Emergency Ventilator”*



**LLNL researchers working on components of the
Supplevent™ Emergency Ventilator.**

**USDA, Agricultural Research Service,
Pacific West Area**

*“Delta Region Areawide Aquatic Weed Project
(DRAAWP)”*

Dr. Patrick Moran, USDA ARS
Dr. Paul Pratt, USDA ARS
Dr. John Madsen, USDA ARS



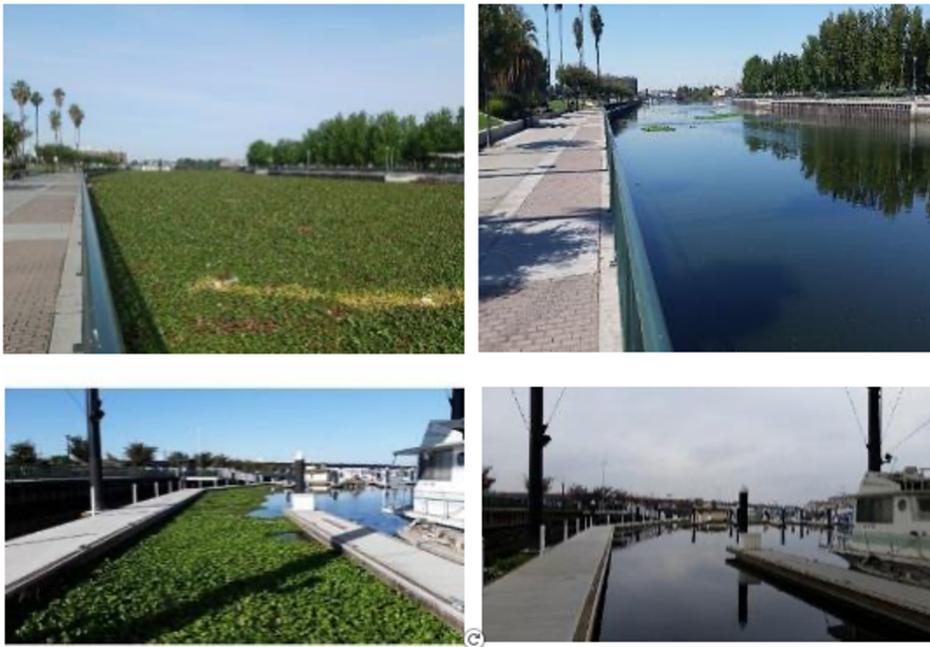
**Agricultural
Research
Service**

Dr. David Bubenheim, NASA
Ames Research Center



USDA, Agricultural Research Service, Pacific West Area

“Delta Region Areawide Aquatic Weed Project (DRAAWP)”



The Port of Stockton, including its downtown area with marinas (white area in upper left image), was plagued with dense infestations of water hyacinth. Targeted mechanical and chemical control early in the treatment season of 2016 by the Division of Boating and Waterways, guided by insight from USDA-ARS research and NASA-Ames remote sensing, led to the clearing of the weeds (right images) and the first occurrence of regattas and a lighted boat parade with associated economic revenues, after several years of cancellations.

**FAR WEST & MID-CONTINENT
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Outstanding Technology Development

Sandia National Laboratories

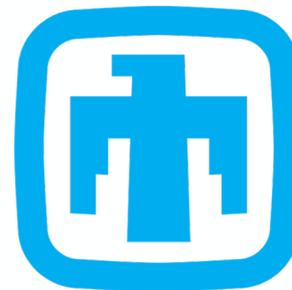
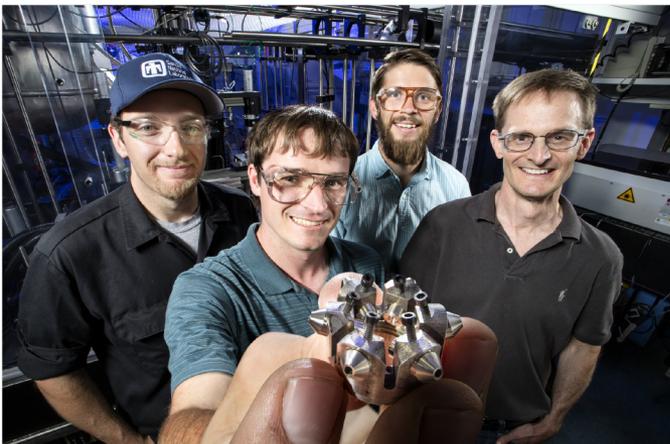
“Ducted Fuel Injection for Clean, Sustainable Diesel Engines and Fuels”

Dr. Charles J. Mueller, Sandia National Laboratories

Christopher W. Nilsen, Sandia National Laboratories

Dr. Drummond E. Biles, Sandia National Laboratories

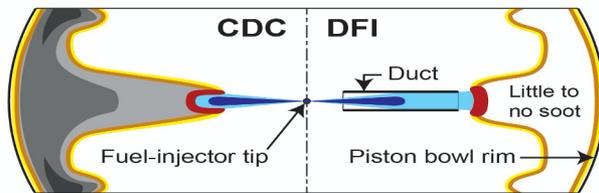
Nathan Henry, Sandia National Laboratories



**Sandia
National
Laboratories**

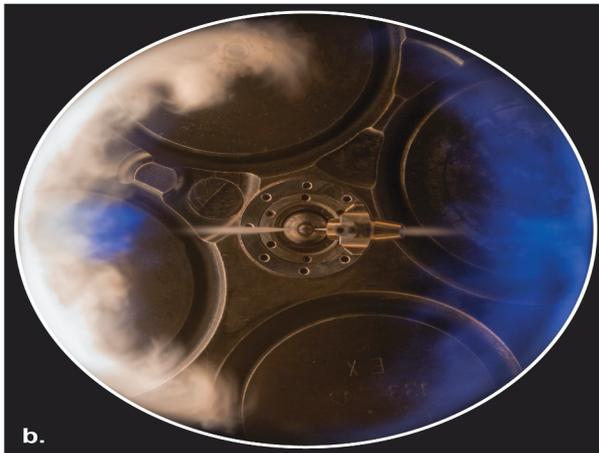
Sandia National Laboratories

“Ducted Fuel Injection for Clean, Sustainable Diesel Engines and Fuels”



- Liquid fuel
- Vapor-fuel/charge-gas mixture
- Autoignition zone
- Soot and soot precursors
- Diffusion flame
- Thermal nitric oxide production zone

a.



b.

Schematics of conventional diesel combustion (CDC, left side) and ducted fuel injection (DFI, right side). A two-orifice injector tip is shown for simplicity.

Naval Facilities Engineering and Expeditionary Warfare Center *“Geoffrey Kemmerer”*

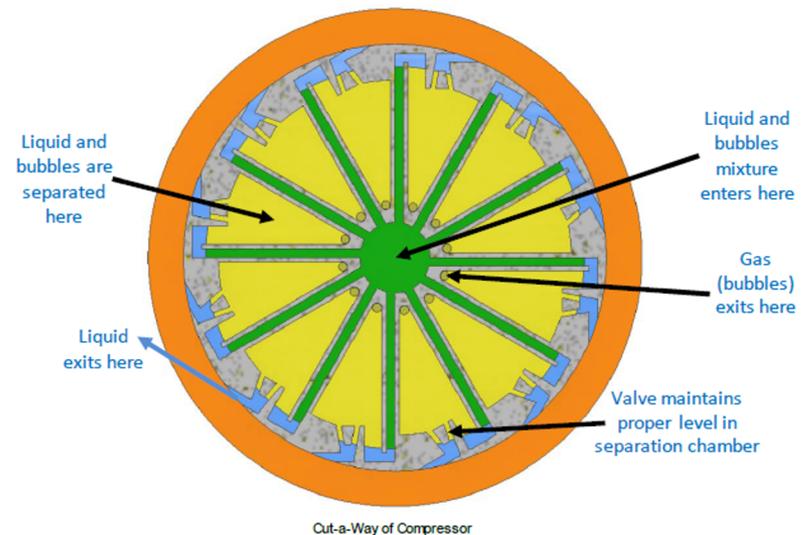
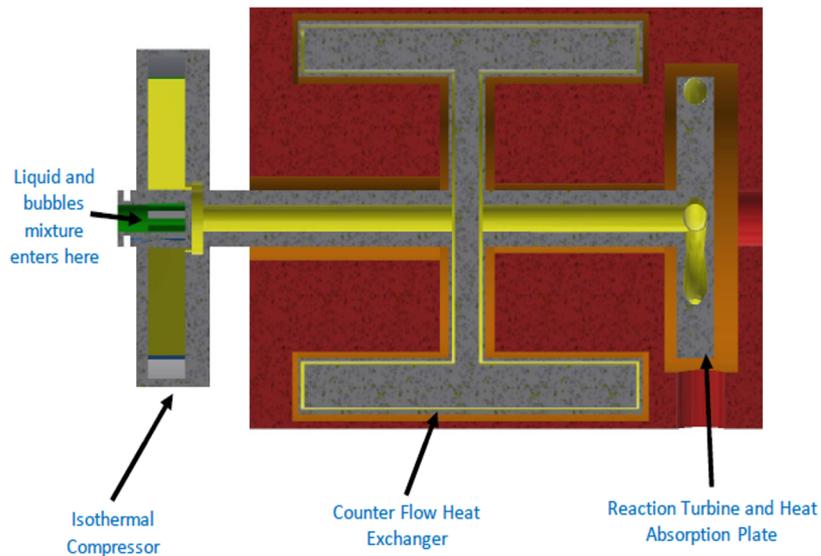


Geoffrey Kemmerer, NAVFAC EXWC

NAVFAC EXWC

“Geoffrey Kemmerer”

Ericsson cycle engine improvements



Cut-a-Way of Compressor

Lawrence Livermore National Laboratory

*“IDEA: Microcapsule Mass Production Platform for
Carbon Capture and Beyond”*

Dr. Joshua Stolaroff, LLNL

Dr. Marcus Worsley, LLNL

Dr. Eric Duoss, LLNL

Dr. Joshua Kuntz, LLNL

Dr. Sarah Baker, LLNL

Dr. Elaine Lee, LLNL

Dr. Annemarie Meike, LLNL

Dr. Congwang Ye, LLNL

Dr. Kevin Paulsen, LLNL

Dr. Julie Mancini, LLNL

Dr. Will Smith, LLNL

Dr. Kenneth Enstrom, LLNL

Dr. Roger Aines, LLNL

Dr. Caitlyn Cook, LLNL

Dr. James Oakdale, LLNL

Dr. Andrew Pascall, LLNL

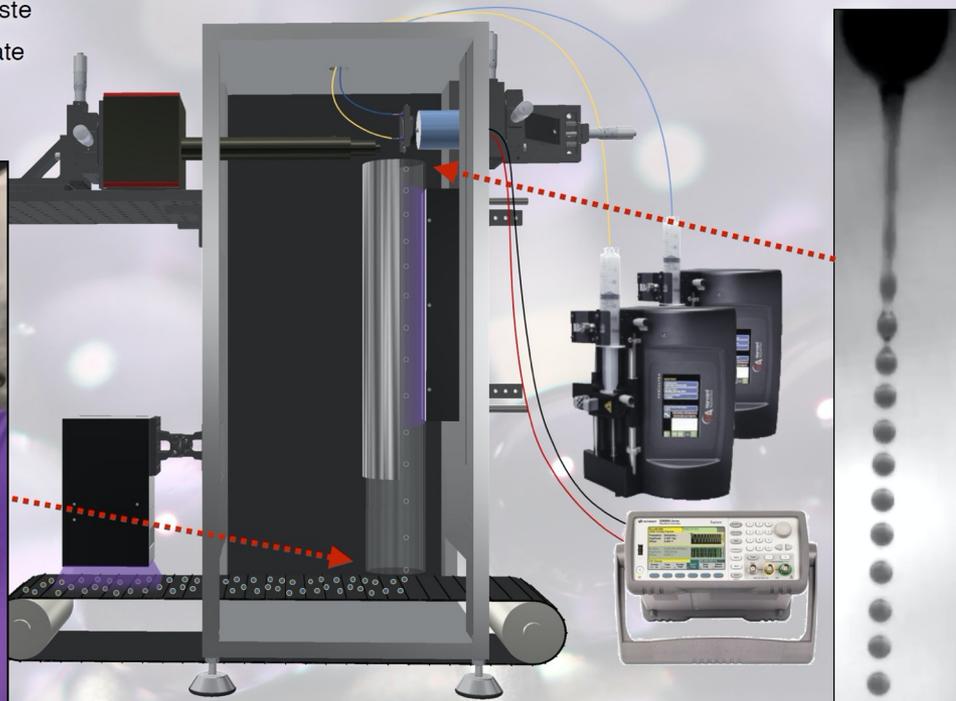
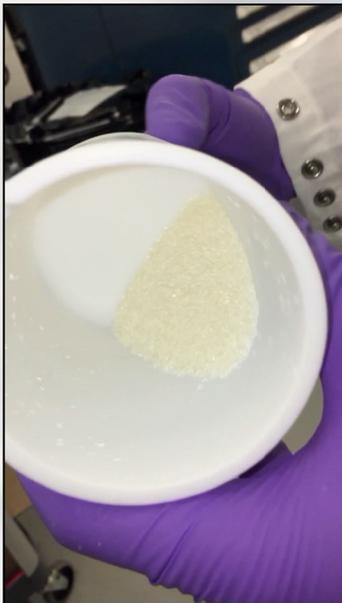
Ashley Hall, LLNL

**Dr. Carlos Martinez, Purdue
University**

Lawrence Livermore National Laboratory

“IDEA: Microcapsule Mass Production Platform for Carbon Capture and Beyond”

- Save 80-99% chemical waste
- 100x or more production rate
- Easier operation and maintenance



In-air Drop Encapsulation Apparatus (IDEA)

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Technology Transfer Professional of the Year

SLAC National Accelerator Laboratory

*“Susan Simpkins, Director of SLAC's Proposal
Advancement Office”*

Susan Simpkins, SLAC
National Accelerator
Laboratory



SLAC National Accelerator Laboratory

“Susan Simpkins, Director of SLAC's Proposal Advancement Office”

“Susan Simpkins brings a remarkable combination of skills to every technology transfer project. She has a keen and perceptive business insight that makes her an ideal strategic partner. She has an extensive understanding of DOE contracting and proposal processes. And she has a very strong understanding of contract law. These skills enable Susan to bring together the science, business, DOE, and legal perspectives needed for success....”

Steve Eglash, Director SLAC Applied Energy Program

Congratulations to the 2020 Far West Award Winners!

Check out the Awards tab to learn more about these amazing T2 efforts.