

Goals of this workshop

- Refined understanding of the most critical and economically important technical challenges to scaling chemoautotrophic microorganisms for fuel production
- Prioritization of technologies necessary for cost-competitive chemoautotrophic fuel production
- Data and/or working knowledge to validate or refute our performance parameters as defined by techno-economic analysis
- Representative examples of technologies potentially capable of addressing ARPA-E technology performance parameters
- Networking and community building among Electrofuels performers and broader scientific and engineering community to potentially build teams capable of addressing engineering and technologies for strong techno-economic performance

Breakout sessions

- 1st breakout session – prioritizing the remaining Electrofuels challenges
 - ▶ What are the main challenges for each feedstock/technology
 - ▶ What are the priorities for each one?
 - Fuel production rates
 - Gas transfer/current density
 - Carbon fixation pathway
 - etc.
- 2nd breakout session – scaling and deployment
 - ▶ Segregated by technologies
 - H₂/gas
 - High capex/high efficiency scenario
 - Low capex/low efficiency scenario
 - Electrochemistry
 - Formate scenario
 - Electrosynthesis
 - Other scenario (e.g. Fe^{3+/2+})

Workshop agenda

8:30-8:50	Eric Toone , Principal Deputy Director ARPA-E
8:50-9:00	Ramon Gonzalez , Program Director ARPA-E
9:00-10:20	Performer Presentations
10:20-10:30	Break
10:30-11:00	Narasi Sridhar , Director, Research & Innovation, Det Norske Veritas
11:00-11:40	Industrial Biotech Panel
11:40-12:00	Ramon Gonzalez
12:00-12:45	Lunch
12:45-1:00	Break and change rooms
1:00-2:45	Breakout Session I
2:45-3:00	Break
3:00-3:45	Breakout Session II
4:45-5:00	Break
5:00-5:30	Report-Outs and Wrap Up