

Examining Challenges in Scaling Hydrogen Energy
A Webinar Hosted by the Chemical Sciences Roundtable
October 7, 2022
1:30 – 3:00 PM EDT

Hydrogen is emerging as a leading solution to reduce the global carbon footprint. Hydrogen is a unique energy source as it produces water after consumption, as opposed to the carbon-emitting energy sources that have traditionally dominated the energy sector. Applications of hydrogen as an energy source are abundant in the transportation and industrial sectors. However, although hydrogen is the most abundant element on earth, it rarely exists in its useful, elemental form. Research efforts are ongoing to develop consistent, cost-effective, and sustainable chemical extraction of hydrogen from a variety of sources. Additionally, recent global interest in decarbonization has called attention to the policy and infrastructure challenges surrounding the use of hydrogen, such as effectively prioritizing which hydrogen sources to employ to balance environmental and economic needs. This webinar, hosted by the Chemical Sciences Roundtable, will discuss research and infrastructure challenges, as well as potential solutions, for the mass implementation of hydrogen as an energy source.

AGENDA

- | | |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1:30 PM | Welcome and Introductions
<i>Ayanna Lynch, Research Assistant</i> |
| 1:35 PM | Overview of DOE Hydrogen Program Activities
<i>Neha Rustagi</i>
<i>Technology Manager</i>
<i>United States Department of Energy</i> |
| 1:55 PM | An overview of H2NEW: Hydrogen (H₂) from <u>N</u>ext-generation <u>E</u>lectrolyzers of <u>W</u>ater Consortium
<i>Rangachary (Mukund) Mukundan</i>
<i>Deputy Director of H2NEW</i>
<i>Lawrence Berkeley National Laboratory</i> |
| 2:15 PM | Safety Implications for Large-Scale Hydrogen Systems
<i>Chris LaFleur</i>
<i>Manager, Risk & Reliability Analyses Department</i>
<i>Sandia National Laboratories</i> |
| 2:35 PM | Q&A and Discussion
Moderated by Ian Rowe
<i>Chemical Sciences Roundtable Member</i>
<i>Office of Energy Efficiency & Renewable Energy</i>
<i>United States Department of Energy</i> |
| 3:00 PM | Webinar Concludes |