

U.S. Department of Energy High-Temperature Electrolysis (HTE) Manufacturing Workshop

Bringing leading experts together to discuss high-temperature electrolysis manufacturing efforts and future opportunities

Organized by the DOE Hydrogen & Fuel Cell Technologies Office (HFTO) and H2NEW Consortium

March 8-9, 2022

Virtual Meeting

(Registration information forthcoming)

Day 1 - Expert Presentations		Day 2 - Parallel Discussions	
11:00 AM	Welcome	11:00 AM	Break-out Discussion Logistics
11:15 AM	Plenary Presentations Part I <ul style="list-style-type: none"> • Introduction • Current Status of HTE Manufacturing • Technoeconomic Analysis • International Perspective on Manufacturing 	11:15 AM	Parallel Discussions Round 1 <ul style="list-style-type: none"> • Thermal Processing • QA/QC (Yield and Reproducibility) • Advanced Manufacturing Methods • Stack Manufacturing and System Integration
1:15 PM	Break	12:45 PM	Break
2:00 PM	Panelist Presentations Part II <ul style="list-style-type: none"> • High-volume Stack Manufacturing • Component Manufacturing 	1:15 PM	Parallel Discussions Round 2 <ul style="list-style-type: none"> • Scaling and Throughput • Protective Coatings • Supply Chain • Sealing and Contacts
4:00 PM	Wrap-up & Adjourn	2:45 PM	Break
		3:15 PM	Report Out
		4:15 PM	Final Thoughts and Adjourn

All times in Eastern Standard Time (EST) and subject to change

Agenda Subject to Change – Draft as of 03/01/2022

Day 1: Overview Presentations from Experts

(Q&A to follow each plenary and final panelist presentation)

11:00 AM	Welcome, Context, and Overview of Workshop Goals Speaker: Dave Peterson and Ned Stetson, DOE HFTO
11:15 AM	Plenary 1: Current Status and Future Focus of HTE Manufacturing Speaker: Olga Marina, Pacific Northwest National Laboratory
12:00 PM	Plenary 2: HTE Stack Manufacturing Cost and Analysis Speaker: Brian D. James, Strategic Analysis
12:45 PM	Plenary 3: Shared Learnings for Achieving High-Volume HTE Manufacturing Speaker: Poul Georg Moses, Haldor-Topsoe
1:15 PM	Break
2:00 PM	Panel 1: Universal Challenges and Innovative Approaches for High-Temperature Solid Oxide Electrolysis Stack Manufacturing at High Volume Panelist 1: Venkat Venkataraman, Bloom Energy Panelist 2: Tony Leo, FuelCell Energy Panelist 3: Scott Swartz, Nexceris Panelist 4: Joe Hartvigsen, OxEon
3:00 PM	Panel 2: Stack Assembly, Scale-Up and Component Manufacturing Panelist 1: John Pietras, Saint-Gobain Panelist 2: Jens Suffner, Schott Panelist 3: Greg Tao, Chemtronomy Panelist 4: Todd Striker, Cummins
4:00 PM	Wrap-up and Adjourn

Day 2: Parallel Break-out Discussions

(Combined report out session after Round 2)

Round 1	Thermal Processing	QA/QC	Advanced Manufacturing	Stack Manufacturing System Integration
Round 2	Scaling and Throughput	Interconnects and Protective Coatings	Supply Chain	Sealing and Contacts