



ASME 2021 **ACES**

Advanced Clean Energy Summit
"Achieving the Clean Energy Promise"

CONFERENCE
September 21–22, 2021

Virtual, Online

Program

<https://event.asme.org/ACES>

The American Society of Mechanical Engineers®
ASME®


SETTING THE STANDARD



ASME 2021 ACES

Time (All Times Are In U.S. EDT)	TUESDAY, SEPTEMBER 21, 2021	
11:15AM to 12:05PM	Welcome Message & Keynote Speaker Deputy Secretary of Energy David Turk	
12:10PM to 1:10PM	DOE and ARPA-E financing clean energy projects <ul style="list-style-type: none">- Natalie Smith; Senior Research Engineer at Southwest Research Institute- Richard Brody, VP Business Development, Quidnet Energy- Michael Reed; Department of Energy's Loan Programs Office (LPO)	
1:15PM to 2:15PM	CCUS (carbon capture utilization & storage) <ul style="list-style-type: none">- Raghubir Gupta; Susteon Inc.- Jen Wilcox; Principal Deputy Assistant Secretary (PDAS) for Fossil Energy at U.S. Department of Energy- Noah Deich; President and Co-Founder, Carbon180	
2:20PM to 3:25PM	International Case Studies <ul style="list-style-type: none">- Fabio Poretti; Technical & Scientific Officer CEWEP - Confederation of European Waste-to-Energy Plants- Christian Sattler; Acting director of the German Aerospace Center's Institute of Future Fuels- Michael Weber; Chief Science and Technology Officer at ENGIE and Josey Centennial Professor in Energy Resources at the University of Texas at Austin	
3:45PM to 4:15PM	Energy Storage - ASME Committee Overview <ul style="list-style-type: none">- Arnold Feldman, JJDS Environmental and Chair ASME Energy Storage Committee	Creating a Sustainable Internal Combustion Engine with Carbon-Neutral and Carbon-Free Fuels <ul style="list-style-type: none">- Kelly Senecal; Convergent Science, Inc.
4:20PM to 5:05PM	Energy Storage: Partnering with DOE's National Labs <ul style="list-style-type: none">- Noel M. Bakhtian; Executive Director for the Berkeley Lab Energy Storage Center- Stephen Hendrickson, DOE- Adam Weber, LBNL- Andrew Mills, LBNL- Anubhav Jain, LBNL- Ashley White, LBNL- Michael Whittaker, LBNL- Sumanjeet (Suman) Kaur, LBNL	Infrastructure on Clean Energy <ul style="list-style-type: none">- Ulrich Muenz, Principal Key Expert for Control Systems for power grids and head of Autonomous Systems and Control at Siemens Technology- Abhinav Krishna; Executive Director, Partnership Development & Commercialization; Constellation
5:10PM	Utilities Announcing Net Zero goals - Round Table & Networking	



ASME 2021 ACES

Time (All Times Are In U.S. EDT)	WEDNESDAY, SEPTEMBER 22, 2021
11:30AM to 12:20PM	Welcome Message & Keynote Speaker Dr. Jerry Yan <i>Future Energy Center, Mälardalen University, Sweden</i> "Future Energy transition towards Carbon Neutrality"
12:25PM to 12:55PM	Climate Change <ul style="list-style-type: none">- Andrew Dessler; Professor of Atmospheric Sciences; Texas A&M University- Andy Miller; Associate Director for Climate with EPA's Office of Research and Development (ORD)
1:05PM to 2:00PM	Investing in Clean Energy <ul style="list-style-type: none">- Juliana Garaizar: Head of Houston Incubator and VP of Innovation for Greentown Labs- Isida Tushe: General Counsel of the FFP New Hydro
2:05PM to 3:15PM	Hydrogen Panel <ul style="list-style-type: none">- Dr. Sunita Satyapal, Director for the U.S. Department of Energy's (DOE's) Hydrogen and Fuel Cell Technologies- Neha Rustagi, Technology Manager for the U.S. Department of Energy's (DOE's) Hydrogen and Fuel Cell Technologies- Dr. Jeffrey Goldmeer; Emergent Technologies Director at GE Gas Power- Robert Schrecengost; Senior Program Manager for the U.S. Department of Energy's (DOE's) Fossil Energy & Carbon Management- Jack Brouwer; Associate Director of the National Fuel Cell Research Center (NFCRC) and Advanced Power and Energy Program (APEP) at the University of California, Irvine
3:35PM to 4:20PM	Nuclear Panel <ul style="list-style-type: none">- Mikal Boe; CEO of CORE Power- Nick Irwin; Principal Investigator Southern Company Services, Inc- Josh Walters; Deputy Program Manager, Molten Chloride Fast Reactor at TerraPower LLC
4:25PM to 4:45PM	Closing

See all speaker details at:
<https://event.asme.org/ACES/Speakers>



ASME 2021 ACES

ACES 2021 Keynote Speakers



Tuesday, September 21 - 11:15am U.S. EDT

David Turk

U.S. Deputy Secretary of Energy

Prior to his nomination as Deputy Secretary, Turk was the Deputy Executive Director of the International Energy Agency (IEA), where he focused on helping countries around the world tackle their clean energy transitions. He also directed reports on the digitalization of energy systems, the future of clean hydrogen, and a project tracking progress on a wide range of clean energy technologies.

During the Obama-Biden Administration, Turk coordinated international technology and clean energy efforts at DOE. During this time, he helped spearhead the launch of Mission Innovation—a global effort to enhance clean energy innovation.

Turk also served as Special Assistant to the President and Senior Director at the U.S. National Security Council, where he coordinated interagency legislative affairs efforts by the full range of national security agencies and provided legislative advice to National Security Council decision-making. He also previously worked at the U.S. Department of State, including as Deputy Special Envoy for Climate Change and helping to coordinate New Start Treaty ratification efforts in the U.S. Senate.

Earlier in his career, Turk worked in both the U.S. Senate, primarily on national security issues, and as the Staff Director of the National Security Subcommittee of the House Oversight Committee.

Turk was born in Quito, Ecuador and raised in Rock Falls, Illinois. He is a graduate of both the University of Illinois at Urbana-Champaign and the University of Virginia Law School. He and his wife, Emily Turk, have three children.



ASME 2021 ACES



Wednesday, September 22 - 11:30am U.S. EDT

Dr. Jerry Yan

Director of Future Energy Profile, Royal Institute of Technology (KTH) and Mälardalen University (MDH), Sweden

Keynote Title: Future Energy transition Towards Carbon Neutrality

Prof. Jerry Yan, PhD: Prof. Jerry Yan is chair professor of Energy Engineering at Mälardalen University, Sweden. Prof. Yan's research interests include advanced energy systems; renewable energy; advanced power generation; climate change mitigation technologies and related environment and policy etc. Prof. Yan published about 400 papers including papers in Science, Nature Energy, Nature Climate & Nature Communications and hold 10+ patents with about 15000+ citations and H-index 62.

Prof. Yan is the editor-in-chief of Applied Energy journal (Impact factor 9.746), Advances in Applied Energy, & editor-in-chief of Handbook of Clean Energy Systems. He is the Chair of International Conferences on Applied Energy. He is an academican of European Academy of Sciences and Arts, and serves as the advisory expert to the UN, EU, & ADB etc. Founder of ICAE, AEii, UNILAB, iCET, Energy Proceedings, EnerarXiv and OC:E etc. He has led research platform (Future Energy Profile) with funding of over 80 MEuro by Swedish Knowledge Foundation and industrial partners, and participated in several EU Projects (FP5, FP6, FP7, and Horizon) and other international and national projects.

He was granted with several awards, such as Global Human Settlements Award of Green Technology, 2014 with supported by UNDP etc. Finalist of SWFF (Securing Water for Food: A Grand Challenge for Development) award by USAID, Government of Sweden and the Netherlands, 2015; William Mong Distinguished Lecture, Hong Kong, 2017. Energy Islands' Award conferred by the European Union with the project TILOS (2017), Highly Cited Researcher (one of the two selected in engineering in Sweden) by Web of Sciences, Swedish Royal Academy of Engineering Sciences (IVA)'s Research2Business Top100.



ASME 2021 ACES

ACES 2021 Conference Organizing Team

Robert Stakenborghs BSME, MSME, PE: *CEO Advanced Clean Energy Consulting, LLC*

Brian Wodka, PE, CxA, CEM, LEED AP: *RMF Engineering, Division Manager/Associate*

Madeleine Kopp: Sales Operations Manager at Stress Engineering Services

ACES 2021 Conference Advisors

Asif Arastu, Ph.D., ASME Fellow, Engineering Specialist: *Unisont Engineering, Inc.*

Charles E. Smith, D.Sc., P.E., F. ASME, M. ASCE: *Consultant (Arctic and Offshore Engineering)*

Dr. Y. Doreen Chin: *President, Yunka Energy, LLC*

Dr. Douglas Hofer: *Engineering Fellow, Heliogen Inc*

Frank Michell: Chair, ASME Clean Energy Technology Group: *Power Industry Consulting LLC*

Guoqiang Wang, Ph.D., ASME Fellow: *Fellow Engineer, Westinghouse Electric Company LLC*

Jeffrey LeBlanc, Ph. D: *Product Design Engineer, Advance Products and Systems*

Mark Lausten: *CSP Technology Manager, Contractor to US DOE*

Robert Braun: Department of Mechanical Engineering, *Colorado School of Mines*

Ryan Neil: Construction Manager, *U.S. Navy*



ASME 2021 ACES

Thank you to our supporting divisions

Nuclear Division
Power Division
Petroleum Division
Arctic and Offshore Engineering (OOAE)
International Gas Turbine Institute
Materials and Energy Recovery
Advanced Energy System Division
Environmental Systems Division

Thank you to our sponsor



JOHNS HOPKINS
WHITING SCHOOL
of ENGINEERING