

## KEYNOTE



**HENRY P.  
ASZKLAR, JR.**

### UNIVERSITY OF CAMBRIDGE

Henry Aszklar is an accomplished senior energy executive focused on transitioning energy systems toward sustainability. He successfully defended his Ph.D. dissertation at the University of Cambridge. Prior to Cambridge, he served as the CEO of Globeleq, the largest independent power producer in Africa, Vice President of AES Corporation, a leading global energy company, and Managing Director of Riverstone, a private equity energy fund. He also advised the U.S. DoE on transitioning to clean hydrogen and was formerly a U.S. DoE Hydrogen and Fuel Cell Technical Advisory Committee member. Before working in the private sector, Henry served as a nuclear engineer in the U.S. Navy. He has a B.S. in Aerospace Engineering from the United States Naval Academy and an M.S. in Finance and Technology Innovation from the MIT Sloan School of Management.

## PANEL



**NICOLE  
BUAN, PH.D**  
MODERATOR

### PROFESSOR, DEPARTMENT OF BIOCHEMISTRY UNIVERSITY OF NEBRASKA - LINCOLN

Nicole Buan is a Professor of Biochemistry at the University of Nebraska-Lincoln. Her research interests encompass redox biochemistry and synthetic biology in archaea, bacteria, and plants with potential applications for sustainable bioenergy and agriculture. Buan lab research has been awarded several patents, and Dr. Buan is the owner of two biotech startups. Dr. Buan is a strong advocate for the next generation of scientists. She serves as Chair of the Biological Chemistry graduate program at UNL, as Associate Editor for the journal Applied and Environmental Microbiology and co-founded the Archaea Power Hour virtual seminar series to highlight recent advances in archaeal biology. Dr. Buan also has interest in science policy and the bioeconomy as an NSRI Fellow and a Council Member of the Engineering Biology Research Consortium.



**GEORGE  
GOGOS, PH.D**

**MODERATOR**

**NEBRASKA CENTER FOR ENERGY SCIENCES RESEARCH (NCESR)  
WILMER J. AND SALLY L. HERGENRADER PRIOR, MECHANICAL AND  
MATERIALS ENGINEERING**

Prof. George Gogos holds a B.S. degree in Mechanical Engineering from the Massachusetts Institute of Technology (1980) and an M.S. (1982) and PhD (1986) degrees in Mechanical Engineering from the University of Pennsylvania. He is currently the Wilmer J. and Sally L. Hergenrader Chaired Professor in the Department of Mechanical and Materials Engineering and Director of the Nebraska Center for Energy Sciences Research (NCESR). Over the past fifteen years, his research emphasis is on two interdisciplinary research areas: a) propane flaming for weed control in agronomic crops, and b) thermal/fluids applications of metallic surfaces that are functionalized with femtosecond lasers. The first one has led to a company on flame weeding (Agricultural Flaming Innovations (AFI), website: [agflame.com](http://agflame.com)). The second one has also led to a new startup (Integrated Functionalized Materials (IFM)). He has also conducted research in other areas that required his expertise in the thermal/fluids sciences, such as fuel combustion, rapid DNA multiplication for detection of biological agents (rapid PCR development), blast wave mitigation and rotational molding. His research is funded by NSF, NASA, DARPA, NIH, ARO, ONR, USDA, Boeing, Honeywell and many space and defense industries. He has co-authored more than 150 technical papers in archival Journals and Conference Proceedings. He teaches undergraduate and graduate courses in heat and mass transfer processes, fluid mechanics, thermodynamics, computational heat transfer and fluid flow and in combustion.



**JAN BOSTELMAN,  
P.E., PMP**

**OWNER, BOSTELMAN ENGINEERING, LLC**

Jan graduated from the University of Nebraska – Lincoln with a B.S. Chemical Engineering and graduate work in Metallurgical Engineering. She attended Graduate school at the University of New Mexico for Nuclear Engineering. Jan has forty four years of experience in commercial light water and advanced reactor work, specializing in safety analyses, fuels, and thermal hydraulics. She currently serves as a Nebraska Board of Engineers and Architects member. She is a Licensed Professional Engineer and Certified Project Management Professional. Jan is the owner of Bostelman Engineering, LLC, with her and her staff conducting work in nuclear industry around the world. She is a Native Nebraskan, and has lived on a farm the last 22 years.



**DAWN  
CALDWELL**

**EXECUTIVE DIRECTOR, NEBRASKA RENEWABLE FUELS**

Dawn Caldwell was born and raised on a diversified farm near Guide Rock, Nebraska and earned a B.S. in Animal Science from the University of Nebraska, Lincoln in 1994. After a few years working in the University of Nebraska Extension system, she began a career in livestock nutrition, first with Deshler Grain and Feed and then Aurora Cooperative. While at Aurora Cooperative, Dawn spent 10 years as a Livestock Specialist, 5 years as Corporate Communications Manager, and 6 years as Head of Government Affairs before moving on to be the Executive Director at Renewable Fuels Nebraska. Dawn has served on a number of state and national boards and enjoys promoting all aspects of Nebraska Agriculture while serving as the Executive Director of Renewable Fuels Nebraska. Dawn and her husband, Matt ranch and farm in North Central Kansas and South Central Nebraska; they have two grown children and two grandchildren.



**ALAN  
DOSTAL**

**ASSOCIATE DIRECTOR OF RESEARCH, NEBRASKA PUBLIC POWER DISTRICT**

Alan L. Dostal is the Associate Director of Research for Nebraska Public Power District (NPPD). He has been employed by NPPD for 45 years and retired as the Corporate Nuclear Business manager where he was responsible for several corporate nuclear related activities. In addition to this role, he was responsible for leading NPPD's Domestic Energy Research and Application initiative. One of the key elements of this initiative was the establishment of the Nebraska Center for Energy Sciences Research with the University of Nebraska – Lincoln in 2006.

He is a 1974 graduate of the University of Nebraska – Lincoln with a Bachelor of Science in Construction Management. He earned his master's degree in business administration from the University of Nebraska – Kearney in 1989.



**ANDREW  
DUNKLEY**

**DEPUTY DIRECTOR OF GOVERNMENT AFFAIRS & PUBLIC POLICY,  
NEBRASKA DEPARTMENT OF ENVIRONMENT & ENERGY**

Andrew Dunkley serves as Deputy Director of Government Affairs & Public Policy with the Nebraska Department of Environment & Energy. In that role, he serves as strategic planner for external affairs, legislative liaison for the agency, and primary contact for the Governor's Policy Research Office.



**ROYCE  
SCHANEMAN**

**EXECUTIVE DIRECTOR, NEBRASKA WHEAT BOARD**

Royce Schaneman serves as the Executive Director of the Nebraska Wheat Board, bringing extensive experience and a deep connection to Nebraska agriculture. A native of Minatare, Nebraska, Royce grew up on a diversified farm, gaining firsthand knowledge of farming and livestock production. He attended the University of Nebraska-Lincoln, where he majored in Diversified Agriculture and Animal Science.

Royce's professional background includes roles with the Cooperative Extension Service and the Nebraska Department of Agriculture. Royce has dedicated himself to supporting farmers and promoting agricultural innovation. His leadership at the Nebraska Wheat Board reflects his commitment to fostering growth, sustainability, and success in Nebraska's wheat sector.

## **EARLY CAREER EXCELLENCE IN RESEARCH AWARD HIGHLIGHT**



**DAN UDEN,  
PH.D**

### **RESILIENCE SPATIAL SCIENTIST, UNL SCHOOL OF NATURAL RESOURCES**

Dan Uden is a Resilience Spatial Scientist in UNL's School of Natural Resources and Department of Agronomy and Horticulture. He is also affiliated with UNL's Center for Resilience in Agricultural Working Landscapes. He studies and teaches about the ecosystems and agroecosystems of Nebraska and the surrounding Great Plains, with an emphasis on geospatial tools for landscape resilience.