



**PRESENTED BY: AEEOK/OREC**



Oklahoma  
Chapter



# CONFERENCE AGENDA

7:30 AM – 8:30 AM

## REGISTRATION & BREAKFAST

Grand Ballroom A, B, C

Registration/Breakfast/Networking

8:30 AM – 8:45 AM

## WELCOME & OPENING KEYNOTE SESSION

Grand Ballroom A, B, C

### AEEOK/OREC WELCOME

**MATTHEW GRAHAM**

AEEOK President

**ERIC POLLARD**

OREC President Elect

8:45 AM – 9:15 AM

### EE INDUSTRY OVERVIEW

**BILL KENT, CEM – Association of Energy Engineers**

AEE Executive Director

9:15 AM – 9:45 AM

### THE NATURE CONSERVANCY – RENEWABLE ENERGY DEPLOYMENT TOOLS

**MICHAEL FUHR – Nature Conservancy**

State Director, The Nature Conservancy

Renewable energy projects that are planned and sited with a purpose-driven approach can make significant and durable contributions to conservation efforts, communities, and climate, and have a higher chance of reaching completion. There are a variety of tools available to developers and corporations that are procuring renewable energy to reach their sustainability goals. Widespread utilization of these tools can influence the clean energy market to move beyond traditional considerations and prioritize important co-benefits extending beyond the achievement of corporate sustainability goals. A coordinated effort can help to ensure that projects are cost-effective while supporting global climate, conservation, and community goals.

9:45 AM – 10:00 AM

### QA and DISCUSSION

10:00 AM – 10:15 AM

## NETWORKING AND EXHIBIT BREAK

Grand Ballroom A, B, C

# CONFERENCE AGENDA

10:15 AM – 10:45 AM

## MORNING BREAKOUT SESSION 1

### TRACK A

Room-300

#### **ENERGIZING TULSA'S ECONOMY: THE ENERGY TRANSITION IN THE OIL CAPITAL OF THE WORLD**

Discover the dynamic landscape of Tulsa's energy sector, where traditional oil and gas expertise seamlessly intersects with renewable energy ventures. We explore the city's vibrant energy innovation ecosystem, showcasing the entrepreneurial spirit, technological advancements, and strategic collaborations that drive this transformation.

By highlighting real-world examples, we unveil the economic implications of Tulsa's energy transition. Witness the growth opportunities, job creation potential, and attractive investment landscape within the burgeoning renewable energy sector. Tulsa's embrace of sustainability goals and energy diversification positions it as a national leader in green initiatives and economic prosperity.

Explore the supportive business environment, policy frameworks, and public-private partnerships that foster energy innovation and entrepreneurship in Tulsa. Learn about collaborative efforts between industry, academia, and government institutions that have propelled the city's rise as a catalyst for cutting-edge technologies, advanced manufacturing of renewable energy assets, entrepreneur-focused energy initiatives, and inclusive workforce collaborations.

**SPEAKER:**

**KELSEY PUTNAM HUGHES**

Director of Energy Tech, Tulsa Innovation Labs

### TRACK B

Room-301

#### **INFLATION REDUCTION ACT & INFRASTRUCTURE INVESTMENT JOBS ACT BENEFITS FOR ENERGY EFFICIENCY PROGRAMS**

The IRA/IIJA is a complicated web of tax credits, deductions, and dedicated funding for programs spread across multiple government agencies. Hundreds of billions of dollars will be allocated for investment in clean energy and climate with a long-term goal of a 50% reduction in climate emissions from 2005 levels. Immediate funding is available for new and refreshed or extended tax credits and deductions with short-term impacts; while additional money will be invested in standing up and expanding grant, loan and rebate programs with medium to long-term impacts. The Inflation Reduction Act is expected to drive over \$3 trillion dollars of capital investment into new energy supply and infrastructure. This presentation will overview the IRA/IIJA as it pertains specifically to tax credits, tax deductions, or funded programs for energy efficiency, building electrification, electric vehicles, and distributed energy resource measures and programs.

**SPEAKER:**

**BRETT FIDLER, CEM**

Senior Manager, ICF

# CONFERENCE AGENDA

10:45 AM – 11:15 AM

## MORNING BREAKOUT SESSION 2

### TRACK A

Room-300

#### STATEWIDE DISTRIBUTED GENERATION ENERGY POLICY

Discussions on the Statewide Distributed Generation Energy Policy or the lack there of! What should we as Oklahomans do to protect and encourage a better implementation of a Statewide Distributed Generation Energy Policy and what that means for all permanent parties in Oklahoma.

**SPEAKER:**

**J. W. PETERS**

President, Solar Power of Oklahoma

### TRACK B

Room-301

#### INFLATION REDUCTION ACT AND 40% TAX CREDITS FOR ICE STORAGE

President Biden signed the Inflation Reduction Act in August 2022. This provided \$369B for clean energy and climate change. It basically extended the tax credits for solar, wind, EV, and geothermal, and expanded the technologies to include CHP, microgrids, and energy storage. It specifically included thermal energy storage. Projects under 1 MW can receive a 30% tax credit. Projects over 1 MW can receive a 30% tax credit if they comply with Prevailing Wage and Apprenticeship Programs requirements. Additional bonus to encourage US production and assistance to coal-closure communities can add another 10% each. Ice storage systems will qualify for a minimum 40% tax credit.

Also, this tax credit can be obtained by schools, local government, and tribal nations through a direct payment from the IRS. This is a game changer in the HVAC industry!

**SPEAKER:**

**BRUCE LINDSAY**

Thermal Storage Business Development Lead, Trane Technologies

# CONFERENCE AGENDA

11:15 AM – 11:45 AM

## MORNING BREAKOUT SESSION 3

### TRACK-A

Room-300

#### **RENEWABLE ENERGY IN OKLAHOMA: PAST, PRESENT, AND FUTURE**

Wind energy has already made significant strides in the state, with Oklahoma being a top producer of wind power in the nation. As technology advances and costs decrease, solar energy is poised to become a dominant player in the renewable energy landscape. Additionally, geothermal energy holds immense potential, utilizing the earth's natural heat to generate clean and reliable power. The Inflation Reduction Act's forward-looking approach has laid the foundation for Oklahoma to harness its renewable energy resources, creating a sustainable future while reducing its reliance on traditional fossil fuels. Continued commitment to renewable energy development will not only drive economic growth and job creation but also position Oklahoma as a leader in the transition to a greener and more sustainable energy future.

**SPEAKER:**

**TRAVIS ROACH**

Associate Professor, Chair of the Department of Economics, University of Central Oklahoma

### TRACK B

Room-301

#### **ENHANCING ENERGY EFFICIENCY AND SUSTAINABILITY THROUGH COLLABORATIVE UNIVERSITY-INDUSTRY ENGAGEMENT: THE OSU INDUSTRIAL ASSESSMENT CENTER**

Learn more about the IAC and Great Plains Center of Excellence at Oklahoma State University - dynamic hub for advancing energy conservation, efficiency, and sustainable development since 1982.

**SPEAKER:**

**DR. HITESH VORA**

Associate Professor, Director – Industrial Assessment Center (IAC), Oklahoma State University

# CONFERENCE AGENDA

**11:45 AM – 1:00 PM**

## **LUNCH PRESENTATION**

**Grand Ballroom A, B, C**

### **ENERGY EFFICIENCY LESSONS FROM COMMISSIONING ST. JUDE'S ADVANCED RESEARCH FACILITY**

As the Vice President of Energy Services, Corey oversees the execution of Entegriy's commissioning, energy modeling, energy assessments, energy management, building testing, and operations & maintenance services. This session intends to educate fellow experts in the energy sector on how to manage and perform commissioning for a large and complex scientific facility, using data and experience gained from work performed at St. Jude's Inspiration 4 Advanced Research Facility (I4ARC) in Memphis, Tennessee.

Objectives:

- Provide an overview of the project, scope of work, and the larger context of this facility
- Identify areas of commissioning success on the Advanced Research Facility
- Understand the detailed changes in the commissioning scope of services St. Jude is considering
- Improve future projects through applications of the lessons and methods learned

**SPEAKER:**

**COREY KEEN**

Vice President - Energy Services, Entegriy Energy Partners

# CONFERENCE AGENDA

1:00 PM – 1:30 PM

## AFTERNOON BREAKOUT SESSION 1

### TRACK A

#### Room-300

#### **MAKING THE HUMAN CONNECTION TO THERMAL PERFORMANCE OF SHELTER**

The ability to connect on a personal level the thermal and financial impact of residential energy efficiency will engage your clientele in a mutually productive benefit. To sell an unknown you must first educate the consumers in order to engage their attention to the possibilities of your product. Using the human body to identify naturally occurring thermal conditions is an introductory step into the complicated science of thermal dynamics and can be a useful tool to parallel their personal residential structure. To discover the connections, we will investigate and compare the: 1. Solar heat gain and loss; 2. The comfort insulation provides; 3. The effect of drafts; 4. When to acquire solar heat gain; 5. How and when to deter solar heat gain; 6. The human body's performance as a mechanical system; 7. The 4 orientation points of thermal differences; and 8. The landscape influence on thermal performance. Utilizing all of the common and parallel thermal performances between humans and their thermal containers will draw greater understanding of the total impact of your services.

**SPEAKER:**

**ANDREW HEBERT**

Natural Environmental Architect, Earth Tools

### TRACK B

#### Room-301

#### **PSO REBATE PROGRAM OVERVIEW AND AWARD-WINNING PROGRAMS**

Learn how Public Service Company of OK offers rebates for Commercial Customers for a variety of energy conservation measures and an overview of PSO's award winning programs for small business and the oil and gas industry.

**SPEAKER:**

**MARK KURIA**

Energy Engineer, Lincus

# CONFERENCE AGENDA

1:30 PM – 2:00 PM

## AFTERNOON BREAKOUT SESSION 2

### TRACK A

Room-300

#### **OSU INDUSTRIAL ASSESSMENT CENTER PANEL DISCUSSION**

Learn from OSU IAC students on the following topics

- Empowering Smart Energy Assessments: Streamlining Data Collection and Assessment Recommendations through a Mobile App & Digital Twins for Energy Management in Industry
- Pinch analysis is a systematic approach used in process engineering to optimize energy consumption and improve efficiency in industrial processes.
- Digitalization and concepts such as digital twins (DT) are anticipated to exert a profound influence on industrial efficiency, specifically within the industrial sector

#### **SPEAKERS:**

**ANUBHAV MISHRA**  
**SNEHAL DURUGKAR**  
**ABINASH KUMAR GUPTA**  
OSU Industrial Assessment Center

### TRACK B

Room-301

#### **INNOVATIVE SOLUTIONS TO ACHIEVING THE ARMY CLIMATE STRATEGY (ACS): AN ACS ROADMAP FOR U.S. ARMY KWAJALEIN ATOLL**

The Army Climate Strategy (ACS) adopts aggressive end state goals to make the Army a "resilient and sustainable land force able to operate in all domains with effective mitigation and adaptation measures against the key effects of climate change, consistent with Army modernization efforts. (ACS, Page 5)." The ACS also explicitly states that: "The Army is committed to 100% carbon- pollution free electricity to meet the needs of its installations by 2030 (ACS, Page 7)." The ACS Roadmap for US Army Garrison – Kwajalein Atoll (USAG-KA) addresses options for providing energy to the vital missions at the Atoll in keeping with the end state goals of the ACS and achieving carbon-free electricity (CFE) by 2030. The recommended Course of Action, Ocean Thermal Energy Conversion, will enable USAG-KA to achieve 100% CFE, energy independence, and resiliency by 2030.

#### **SPEAKER:**

**PAUL RYCKBOST**  
Vice President, Energy & Utility Solution,  
Guernsey



# CONFERENCE AGENDA

2:00 PM – 2:30 PM

## ACADEMIC POSTER SESSION & NETWORKING BREAK

Grand Ballroom A, B, C

### CHARACTERIZATION OF THE MICROBIAL COMMUNITY CAPABLE OF METHANE OXIDATION IN THE ZODLETONE SPRING FOR POTENTIAL METHANE EMISSION MITIGATION

**PRESENTERS:**

**IMAM TASKIN ALAM, BABU FATEHPURE**

Department of Microbiology and Molecular Genetics, Oklahoma State University

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### INNOVATING PRODUCED WATER MANAGEMENT IN THE ENERGY SECTOR: HARNESSING HALOPHILIC BACTERIA FOR TREATMENT AND REUSE

**PRESENTERS:**

**DAMILARE AJAGBE<sup>1</sup>, MARIAN NIMEH<sup>1</sup>, ASHTON DAVIS<sup>1</sup>, MARK KRZMARZICK<sup>2</sup>, BABU FATEHPURE<sup>1</sup>**

<sup>1</sup> Department of Microbiology and Molecular Genetics, Oklahoma State University

<sup>2</sup> Department of Civil and Environmental Engineering, Oklahoma State University

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### UTILIZING RELIABLE NON-DESTRUCTIVE TECHNIQUES TO QUANTIFY CONCRETE DURABILITY

**PRESENTERS:**

**JULIO ROJAS MEZA<sup>1</sup>, MASHHAD FAHES<sup>2</sup>, MATTHIAS NOLLERT<sup>3</sup>, ROYCE FLOYD<sup>1</sup>, SHREYA VEMUGANTI<sup>1</sup>, JEFFERY VOLZ<sup>1</sup>**

<sup>1</sup> School of Civil Engineering and Environmental Science, University of Oklahoma

<sup>2</sup> School of Petroleum and Geological Engineering, University of Oklahoma

<sup>3</sup> School of Sustainable Chemical, Biological, and Materials Engineering, University of Oklahoma

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### OPTIMIZATION OF COMPOSITE RESPONSE FOR TRANSFORMATIVE REINFORCEMENT APPLICATIONS

**PRESENTERS:**

**ALEXANDRA LIEVER, SHREYA VEMUGANTI, AIKATERINI KYPRIOTI**

School of Civil Engineering and Environmental Science, University of Oklahoma

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### BENEFITS OF SECONDARY LOOP SYSTEMS: THERMAL STORAGE AND DEMAND RESPONSE

**PRESENTERS:**

**JEFFREY D. SPITLER, CHRISTIAN K. BACH, POURIA MOGHIMI**

School of Civil Engineering and Environmental Science, University of Oklahoma

# CONFERENCE AGENDA

2:30 PM – 3:00 PM

## AFTERNOON BREAKOUT SESSION 3

### TRACK A

Room-300

#### **SMART OPERATION OF ENERGY STORAGE SYSTEMS IN THE EVOLVING POWER SYSTEM**

Novel technologies for real-time control and operation of a battery energy storage system (BESS) to address some of the emerging problems in distribution systems.

The developed methodologies incorporate adaptive control techniques, machine learning algorithms, discrete signal processing theories, and optimization methods with power system dynamics for smart operation of BESS in the electrical grid. To demonstrate the effectiveness of developed technologies, a real-world testbed platform including BESS, solar PV, and electric vehicle DC fast charger interacting with a distribution system is designed and set up. The proposed technologies have been tested over several dynamic scenarios including voltage regulation, shaping power demand, smoothing solar power generation, and enhancing grid resiliency in the context of robustness and rapid recovery.

**SPEAKER:**

**DR. HAMID NAZARIPOUYA**

Assistant Professor, Oklahoma State University

### TRACK B

Room-301

#### **SMART HOMES AND THE ELECTRIFICATION OF OKLAHOMA**

Join influential thought leader Bear McAfee at the Envision 2023 conference on home electrification in Oklahoma, where we will explore the transformative power of solar photovoltaics (PV). Discover how solar energy is reshaping the way we power our homes, including topics on EV charging, smart panels, and more. With the rise of electric vehicles, homeowners seek convenient and affordable solutions for home charging. By integrating solar PV systems with EV infrastructure, we can tap into renewable energy and reduce our carbon footprint. Learn about the benefits of smart panels, which provide real-time energy data, enabling homeowners to optimize usage and boost efficiency. By connecting solar PV systems to smart panels, residents can make intelligent energy decisions, embracing a cleaner and more sustainable future. Central to the discussion is the immense potential of solar PV in Oklahoma, with its abundant sunlight resources. McAfee, a leading expert in solar photovoltaics, will share insights on reducing electricity bills, increasing energy independence, and minimizing environmental impact.

**SPEAKER:**

**BEAR McAFEE**

Director of Sales, Solar Power of Oklahoma

3:00 PM – 3:30 PM

## CONFERENCE CLOSING AND DOOR PRIZES

# SPEAKER BIOS



## **BILL KENT, CEM**

Executive Director, Association of Energy Engineers

Bill has served as Executive Director of AEE since November 2017, succeeding Al Thumann, Founder of AEE, who served as AEE's Executive

Director for 40 years. Bill has been involved in the energy management industry for over 30 years and brings expertise in energy efficiency, instrumentation, automation, building systems, and executive leadership. In his 10 years at AEE, he has led many key initiatives and has been managing the day-to-day operations of the organization in his role as Managing Director.

He is responsible for managing and developing programs for membership, certification, publications, and conferences. He has worked with many local, state, and federal agencies to develop workforce training programs and led the initiative to gain ANSI 17024 Accreditation and U.S. DOE Better Buildings Workforce Guidelines recognition of the AEE certifications.

Bill attended the University of Georgia and is a Certified Energy Manager (CEM), a member of the Commercial Workforce Credentialing Council Board of Advisors, a member of the Certification and Licensure Advisory Group for Credential Engine and was previously Vice President of Sales & Marketing for Varec, a Leidos company.



## **BRETT FIDLER, CEM**

Senior Manager, ICF

Brett has more than 20 years of experience related to energy and environmental policy and program implementation and has spent the last seven years as Program Manager with ICF implementing the Small Business Energy Solutions (SBES) program for PSO. He also serves as ICF Portfolio Manager for all seven PSO commercial and industrial energy efficiency offerings. Prior to joining ICF, Brett spent eight years developing and managing large-scale municipal energy efficiency programs for the City of Tulsa, first as Sustainability Director then as Director of Energy & Enterprise Development in the Mayor's Office. He managed public and private sector grants, including two U.S. EPA Brownfields grants and the Rockefeller Foundation 100 Resilient Cities grant. He was also involved in sustainability and resilience planning, energy conservation and management, and renewable energy and low impact development policies. Brett also spent ten years at the Tulsa Zoo where he served as the Zoo's first Director of Conservation and Research.



## **MICHAEL FUHR**

State Director, The Nature Conservancy Oklahoma

Mike Fuhr has been with The Nature Conservancy for 25 years serving in a variety of roles. He became the Director of TNC's Oklahoma Chapter in January of 2005. He manages the Conservancy's work in Oklahoma, including conservation, operations, and fundraising. The Oklahoma chapter, which includes 29 staff, owns or manages more than 100,000 acres of land as a way to develop science-based, innovative approaches to collaborative conservation. The Conservancy's most recognized project is the 40,000-acre Tallgrass Prairie Preserve in Osage County where more than 2,000 wild bison roam the prairie. He also leads the Conservancy's renewable energy siting work for the Great Plains Division and has worked with the renewable energy industry for more than 12 years.

After growing up in Buffalo Grove, Illinois, he attended the University of Illinois where he received his bachelor's degree in biology. He went on to attend graduate school at U of I where he received his master's degree in biology with a focus on aquatic ecology. Mike and his wife, Heather, stay busy through involvement with their 4 children.



## **BRUCE LINDSAY**

Thermal Storage Development Lead, Trane Technologies

Bruce Lindsay, PE, CEM is the Thermal Storage Business Development Leader for Trane Technologies. He was the Executive Director of the EPRI Thermal Storage Research Center. Most recently, he was the Energy Manager for Brevard County Public Schools, with 20 ice-storage systems. Mr. Lindsay is very involved in ASHRAE, serving on multiple technical committees, the Epidemic Task Force, president of Space Coast Chapter, and was recently appointed an ASHRAE Distinguished Lecturer.

# SPEAKER BIOS



## **KELSEY PUTNAM HUGHES**

Director of Energy Tech,  
Tulsa Innovations Lab

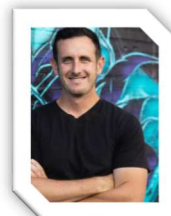
Kelsey leads the energy tech portfolio for the Tulsa Innovation Labs as the Director of Energy Tech. She brings with her over 12 years of work experience in the energy sector; working at the regional to national level with Tulsa-based energy companies. Kelsey began her career in the oil and gas industry as a geologist, which she then leveraged into leadership roles in the renewable energy industry as the CEO/founder of a mechanical solar construction firm and municipal solar project development consultancy; truly embracing the energy transition. Kelsey has an additional interest in the intersection of academic, economic, and community development and co-founded the NFP trade association, the Tulsa Renewable Business Alliance in 2021. In 2022 Kelsey was selected as an ALLY Energy GRIT (growth, resilience, innovation, and talent) award winner to celebrate her entrepreneurial work in Tulsa. Kelsey now leads the Energy Tech portfolio of initiatives for the Tulsa Innovation Labs where she applies her extensive energy sector experience to developing programs and initiatives that build on the region's energy legacy and positions Tulsa as a vital energy hub city through the energy transition.



## **J. W. PETERS**

President, Solar  
Power of  
Oklahoma

J.W. Peters is an experienced business owner, solar advocate, and leader in renewables in Oklahoma. Driven by passion to have every Oklahoman utilize solar generation systems, he takes pride in educating Oklahomans on the benefits of renewables and the cost savings of solar. As one of the founders of Solar Power of Oklahoma, he's spent the past 7 years building a company that will provide the absolute best customer experience for their prospective and current customers. J.W. leads by example, including his time spent installing solar on hot Oklahoma summer roofs alongside his business partner Kevin Jones in the early years of the company. J.W. is an active member of his community and currently serves on the board of the Civic Center Foundation, the Oklahoma Renewable Energy Council and is the current president of the Oklahoma Solar Association. As a proud alumnus of Salt and Light Leadership Training, LOKC Class 30, and LOK Class 22, J.W. gives numerous talks throughout the year across the state about the importance of solar energy and energy diversity. J.W. Peters is a true Solar Energy pioneer in Oklahoma.



## **TRAVIS ROACH**

Associate Professor, Chair of the  
Dept. of Economics, University of  
Central Oklahoma

Travis Roach, Ph.D., is an associate professor and chairperson of the Department of Economics and an MBA faculty member at the University of Central Oklahoma. He is also the founding director of the Central Policy Institute - an interdisciplinary research center housed in the College of Business.

Roach originally hails from Austin, Texas, and made his way to Oklahoma by way of Lubbock, Texas, where he completed his doctorate in economics. After completing his doctorate, Roach served as a post-doctoral fellow at the National Wind Institute where he taught courses on wind energy economics, policy and law. Prior to living on the windy plains of West Texas, he attended the University of North Texas where he received a B.A. in music and a B.S. in economics.

Roach's research interests are in the fields of economic policy, environmental economics, labor economics and industrial organization. His research has focused on carbon dioxide emissions from energy use, alternative energy sources including wind and biofuels, and the unintended consequences of energy production and consumption. This research has been published in top field journals including Energy Economics and Energy Policy. Additionally, this work has been featured in newspapers locally and around the world including the Oklahoman and the Journal Record in Oklahoma City, the Sydney Morning Herald of Australia, and the Tyee in British Columbia, Canada.



## **DR. HITESH VORA**

Associate Professor, Director –  
Industrial Assessment Center,  
OSU

Hitesh Vora, PhD, is Director of the OSU Industrial Assessment Center, Director of OSU's SMART Lab, and Assistant Professor for the Mechanical Engineering Department. Dr. Vora has a PhD in Materials Science and Engineering, an MS in Mechanical Engineering Technology, and a BE in Production Engineering. His research interests include 3D printing, cyber manufacturing, laser aided manufacturing, multi finite element modeling, laser processing of materials, and biomaterials process and product development. Dr. Vora was awarded a Summer Fellowship in 2016 at the Naval Surface Warfare Center – Corona Division (Norco, CA). He has published numerous journal articles, conference proceedings, and magazine articles.

# SPEAKER BIOS



## COREY KEEN

Vice President, Energy Services,  
Entegriety Energy Partners

Corey has been in the construction industry for 20 years, starting as a mason tender while finishing his degree in Civil Engineering from the University of Arkansas. He has immersed himself in the energy services field since 2012, spearheading the commissioning efforts for Entegriety on their most complex projects. Corey has been the Commissioning Agent of Record on over 150 projects totaling over 6 million square feet, and he has accumulated extensive knowledge and project experience throughout this time.

Corey's hands-on, methodical approach to problem solving is complimented by his organization and communication skills. An exceptional project manager and team leader, clients appreciate his ability to stay on top of every facet of a project to ensure Entegriety's services are maximized for the client and project team alike.

As the Vice President of Energy Services, Corey oversees the execution of Entegriety's commissioning, energy modeling, energy assessments, energy management, building testing, and operations & maintenance services.



## MARK KURIA

Energy Engineer, PSO/ICF/  
Lincus

Mark Kuria holds a Bachelor of Science in Mechanical Engineering with an emphasis was on Thermofluids in 2018 from California State Polytechnic University in Pomona. Mark obtained his degree while interning at Lincus, Inc. and now works for Lincus, Inc. as a full-time energy engineer. Mark has four years of experience performing quality assurance on over hundreds of custom energy efficiency projects in California and Oklahoma from various market segments and end-uses, including lighting, HVAC, pumps etc. in the agricultural, commercial, residential, and industrial segments. I have also supported GHG emissions verification for electricity transactions and power generation facilities. I have experience performing ASHRAE level 1 and 2 energy auditing, use of building energy modeling tools, data analysis, site inspections, and market research.



## ANDREW HEBERT

Natural Environmental  
Architect, Earth Tools

Andrew Hebert is '75 graduate of University of Southwestern Louisiana (University of Louisiana at Lafayette) with a B.A. in Architecture, his thesis on "Alternative Energy Systems", he has honed his skills from a mechanical contractor, home builder, public utility company, and an architectural firm. He opened an architectural practice in 1988 and retired in 2003. Having built his own passive solar residence in 1984, he is thriving on the belief in building designs working with nature.



## PAUL RYCKBOST

Vice President, Energy &  
Utility Solutions, Guernsey

Paul Ryckbost is a Vice President and Project Manager in the Energy & Utility Solutions division at Guernsey in Oklahoma City. Paul is both a planner and an engineer, approaching infrastructure from a holistic perspective. He is a member of the American Institute of Certified Planners (AICP), a Professional Engineer in Oklahoma, and a Project Management Professional (PMP). Paul has a BS in Engineering from Calvin University in Grand Rapids, Michigan, and a Master of Urban Planning from the University of Michigan.



## DR. HAMID NAZARIPOUYA

Assistant Professor,  
Oklahoma State University

Dr. Nazaripouya is an Assistant Professor at Oklahoma State University and an Assistant Adjunct Professor at the University of California, Riverside. He obtained his Ph.D. degree from the University of California, Los Angeles (UCLA). He received the M.S. degree in power systems from Louisiana State University in 2013, and the M.S. degree in power electronics from the Sharif University of Technology in 2010. His research on integration and control of distributed renewable energy resources and battery storage systems has led to multiple publications and patents in the field. He is currently the lead Primary Investigator (PI) for over million dollars research projects. Dr. Nazaripouya has received several honors and awards, including IEEE SFV Section Rookie of the Year Award, IEEE IAS and PES Presentation Awards, and the University of California Dissertation-Year Fellowship Award.

# SPEAKER BIOS

## ABINASH KUMAR GUPTA

Graduate Student, Industrial Assessment Center, OSU

Abinash Gupta is an accomplished industrial engineering and management graduate student at Oklahoma State University. He earned his undergraduate degree in Mechanical Engineering from the esteemed National Institute of Technology, Jaipur, India, in 2018. Abinash has extensive experience in the manufacturing industry, having worked as a Process Engineer at Denso International for almost four years after completing his undergraduate studies.

Currently, Abinash is working as a Research Assistant and is a lead student in the Industrial Assessment Center. His work at the Industrial Assessment Center has helped several manufacturing companies save energy, reduce cost, and increase productivity, resulting in savings of approximately \$460,000 to date. As part of his research project, Abinash is exploring the potential of Digital Twins to improve energy management and audits, offering industries innovative ways to monitor, control, and optimize their energy consumption.

Abinash is passionate about supply chain and energy management and is dedicated to supporting clean and equitable energy transition. He aspires to utilize his skills to solve energy supply chain challenges for organizations in the future.



## ANUBHAV MISHRA

Graduate Student, Industrial Assessment Center, OSU

Anubhav Mishra is an accomplished Computer Science professional specializing in machine learning. Leveraged Machine Learning algorithms, managed ML models, and implemented MLOps to optimize performance. Demonstrated expertise in harnessing artificial intelligence to implement smart solutions. Proficient in Python, frameworks, and a range of tools and technologies including iOS/Android applications development.



## BEAR McAFEE

Director of Sales, Solar Power of Oklahoma

Bear McAfee is a community advocate and emerging leader in Oklahoma City. He possesses a passion for using his gifts and skills for the betterment of others. Bear obtained his B.A. in Communication from the University of Oklahoma in 2016 and his MDiv from The Southern Baptist Theological Seminary in 2021. Bear's eclectic vocational path has always put him in the intersection of leadership and service of others. Bear currently serves as the Director of Sales for Solar Power of Oklahoma where he oversees the residential and commercial sales teams for SPO. Bear is passionate about seeing Oklahoma continue its legacy as an Energy State as we pioneer innovation through alternative energy opportunities.

## SNEHAL DURUGKAR

Graduate Student, Industrial Assessment Center, OSU

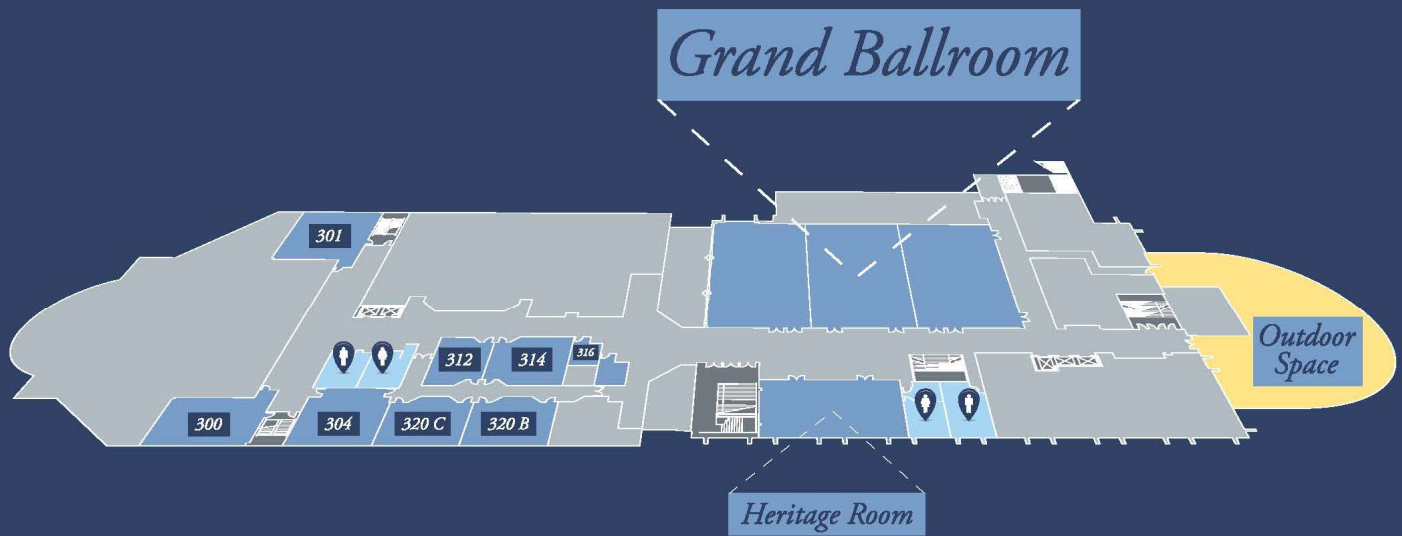
Snehal Durugkar is an aspiring Energy Engineer with a solid background in continuous improvement and quality control. Snehal has two years of experience as a Quality Control Engineer and honed skills in optimizing processes and ensuring high standards of quality. Currently, she is pursuing master's degree in industrial engineering and management at Oklahoma State University, where her focus lies in Engineering Management.

Snehal is engaged as a graduate Research Assistant at the Industrial Assessment Center, which is funded by the Department of Energy. This opportunity allows her to apply her knowledge and skills to contribute to the research initiatives aimed at enhancing industrial energy efficiency. Snehal is the Treasurer of the Student Chapter for the Association of Supply Chain Management.

# CONFERENCE MAP

**UCO** UNIVERSITY OF CENTRAL OKLAHOMA  
**Nigh University Center**  
*Third Floor*

*North* →  
*(toward Broncho Lake)*



*Grand Ballroom (Ballroom A, B, and C)*

*Heritage Room*

*Conference Room 300 (Carl Albert Room)*

*Conference Room 301 (Robert S. Kerr Room)*

*Conference Room 304 (Mary Fallin Room)*

*Conference Room 312 (Clara Luper Room)*

*Conference Room 314 (Henry Bellmon Room)*

*Conference Room 316*

*Conference Room 320B*

*Conference Room 320C*



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