THANK YOU TO OUR HOSTS & SPONSORS

CONTENTS

WELCOME .................................................. 3
MONDAY SESSIONS ................................. 4
STUDENT RESEARCH COMPETITION .......... 7
PROGRAM OVERVIEW .............................. 10
TUESDAY SESSIONS ............................... 12
UT ENERGY TOURS & AFFILIATED EVENTS .... 15
WEDNESDAY SESSIONS ......................... 16
THURSDAY – FRIDAY: TJOGEL SYMPOSIUM .. 18
MAPS ...................................................... 20

ENERGY WEEK WIFI ACCESS

1 Connect to the attwifi network
2 Open your web browser
3 Click on "Use A Coupon"
4 Enter WP45-U4MM-SN

TABLE OF CONTENTS 1
Longhorn Energy Club seeks to leverage the world-class academic, co-curricular, and extra-curricular energy opportunities at UT for the betterment of all members of the UT community. In particular, the aim of this organization shall be to build community and collaboration between students at UT, support energy-related activities and events, and to aid members in pursuit of energy careers.

John Adamo ................................................................. President
Matthew Haley .......................................................... Vice Chair
Peter Tutton ............................................................. Chair – Energy Week
Jingwei Meng ............................................................ Chair – Energy Week
Aanandh Chandrasekar ........................................ VP of Entrepreneurship
Michael Liu .............................................................. VP of Entrepreneurship
Pamela Daitch ........................................................... VP of Finance
Sam Johnson ............................................................ VP of K-12 Outreach
Henar Rabadan Peruch ........................................ VP of Alumni Relations
Mitch Riley .............................................................. VP of Corporate Relations
Olivia Hanjani Loa ...................................................... VP of Corporate Relations
David Drew ............................................................. VP of Marketing
Pranab Sachithanandan ........................................... VP of Marketing
Saad Siddique ........................................................ Logistics – Energy Week
Regina Canals Lopez Velarde ................................. Logistics – Energy Week
Katherine “Katie” Drews .......................................... Energy Week Speakers
Viren Joopelli ............................................................ VP of Research

Welcome to the fourth UT Energy Week, an annual gathering of prominent energy experts from academia, industry, government and regulatory agencies, and nonprofit organizations to highlight the interdisciplinary collaboration and sharing of knowledge and expertise we believe is essential in unraveling complex energy challenges facing our world.

UT Energy Week is co-hosted by the university’s Energy Institute, the KBH Center for Energy, Law & Business, and two student-run organizations – the Longhorn Energy Club and the Texas Journal for Oil, Gas, and Energy Law (TJOGEL). UT Energy Week is also supported by schools and colleges engaged in energy research across the UT Austin campus.

The goals of the conference are to create a platform for experts to express varying insights on pressing energy issues and emerging trends; to highlight the work of UT Austin students involved in energy research; and to demonstrate the depth and breadth of knowledge among scientists and other researchers at UT Austin, the energy university.

Through a series of panel discussions and keynote presentations, you’ll hear spirited exchanges on a wide range of topics. The 2018 program features experts who will explore a variety of issues, including the prospects for large-scale utility storage, the electric grid of the future, market dynamics behind transformative changes in the transportation sector, and evolving energy geopolitics.

On Thursday, Feb. 1 and Friday, Feb. 2, TJOGEL will host its annual symposium of continuing education, featuring dynamic speakers and energy leaders.

In addition to the main sessions, this year’s conference also features several affiliated events, including the student-run Energy Olympiad, highlighted by two competitions – the Longhorn Energy Summit and the Youth Energy Summit.

Also, be sure to check out the student energy research poster competition, which provides the energy leaders of tomorrow an opportunity to showcase their energy research.

For more, view the complete schedule for UT Energy Week in this program or the online schedule of events at http://energyweek.utexas.edu/2018-program/

Thank you for attending UT Energy Week 2018 and for giving us the opportunity to share with you some of the vital energy research underway at UT Austin, the world’s premier energy university.

Sincerely,

Dr. Thomas F. Edgar .............................. President, Longhorn Energy Club

John Adamo ............................... President, Longhorn Energy Club
9:30 – 12:00 | ENERGY TECHNOLOGY START-UP WORKSHOP
Separate registration; see page 6 for description

12:30 – 1:30 | CONFERENCE REGISTRATION

1:30 – 1:45 | WELCOMING REMARKS
Introduction by Tom Edgar,
Director, UT Austin Energy Institute
Opening Remarks by Gregory Fenves,
President, The University of Texas at Austin

1:45 – 2:15 | OPENING KEYNOTE ADDRESS: “THRIVING IN THE
ENERGY TRANSITION – INNOVATING TO A LOW
CARBON FUTURE”
Ajay Mehta, GM of Long-range Research & New Energy Technologies, Shell

2:15 – 3:00 | QUICK CHAT: BIOFUELS – PROMISING
ALTERNATIVE OR A BROKEN PROMISE?
The biotechnology industry is growing rapidly. Our panelists will discuss where the industry is heading, what are the challenges it faces, and how biotechnology and biofuels have the potential to change how we interact with energy.
Todd Kuiken, Senior Research Scholar, Genetic Engineering and Society Center at NC State University
David Ramjohn, CEO, AlgEternal Technologies, LLC
Schonna Manning, Director of R&D, UTEX Culture Collection of Algae (Moderator)

3:00 – 4:00 | PANEL 1: CURRENT APPLICATIONS OF ENERGY
STORAGE SYSTEMS AND THE WAY FORWARD FOR
AT-SCALE INTEGRATION
A case study of three battery storage pilot projects underway in Central Texas Utilities: the Georgetown Westside Service Center Project, the Austin Energy SHINES project and the Pedernales Electric Co-op Johnson City project. The panel will discuss the unique technical aspects of each project including the different proposed battery functions, application of smart inverters and optimization software. The panelists will also discuss how each project aims to increase renewable penetration and enhance grid reliability, and how this will benefit utility customers. Finally, the panelists will discuss each utility’s outlook on the future of battery storage in their service areas.
Chris Foster, Manager of Resource Planning & Integration, City of Georgetown
Kurt Stogdill, Manager for Green Building and Sustainability, Austin Energy
Eric O’Shaughnessy, Market Research Analyst, NREL
James Spaulding, Director, Project Development, Pedernales Electric Cooperative
Bert Haskell, Chief Technology Officer, Pecan Street Inc. (Moderator)

4:00 – 5:00 | PANEL 2: BLOCKCHAIN’S IMPACT TO TRANSACTIONAL
SERVICES IN THE ENERGY INDUSTRY
What is blockchain and how is it transforming transaction services? What is blockchain’s potential impact in the energy space and what are the immediate and long-term opportunities for this technology to change energy business structures? How will blockchain uproot the customer-utility relationship or disintermediate certain functions in natural resource supply chains?
David Johnston, Chairman, Factom
Karl Kreder, Co-Founder, Grid+
Melanie Bell, IT Strategist, Chevron Information Technology Company
David Livingston, Deputy Director, Global Energy Center of the Atlantic Council (Moderator)

5:00 – 7:00 | RECEPTION & COMPETITION AWARDS
The Energy Technology Start-up Workshop will facilitate connections between UT students interested in and/or working on energy startup initiatives and the greater Austin community.

**WORKSHOP SCHEDULE**

9:30 – 10:00  STATE OF THE AUSTIN ENERGY INNOVATION ECOSYSTEM  
by ATI, Zpryme

10:15 – 10:45  INTRODUCTION TO STUDENT PROJECTS

11:00 – 12:00  ENGAGEMENT WITH COMMUNITY PARTNERS

---

**Student Research Poster Competition**

Research into the development of novel energy and resource-related technologies and the affiliated policies is a vital part of addressing the key energy-related challenges facing humanity in the 21st century. To promote the development of energy research in the academic community, UT Energy Week allows for full-time undergraduate and graduate students to participate in an interdisciplinary research poster competition. Prizes will be awarded to the best research posters in each of the categories below:

- Environmental and Sustainability
- Renewable Energy and Energy Storage
- Fossil Fuels and By-Products

A panel of judges from academia and industry will score research posters submitted by the students selected to present at the research competition.

Prizes will be awarded to the two highest scoring posters from each competition category and there will be one overall crowd favorite and one overall best undergraduate poster:

First place $500  
Second place $250  
Crowd Favorite $250  
Best undergraduate $200

Prizes will be announced at the Awards Reception to be held in the Alumni Center following the Energy Week sessions on Monday, January 29, 2018. See the list of entrants on the following pages.
## Environmental & Sustainability

<table>
<thead>
<tr>
<th>Student</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sahil Bhandari</td>
<td>Investigating sources of air pollution in cities using mobile monitoring and source apportionment techniques</td>
</tr>
<tr>
<td>Melanie Merrick</td>
<td>High Temperature Gas Separation Properties of TADPS-based Poly(benzimidazole) Membranes</td>
</tr>
<tr>
<td>Jojo France-Mensah</td>
<td>Budget Allocation Model for Sustainable Pavement Maintenance and Rehabilitation Planning</td>
</tr>
<tr>
<td>Hari Ganesh</td>
<td>Reducing fuel use in a heat treating furnace by heat integration and operational optimization</td>
</tr>
<tr>
<td>Avery Brooks</td>
<td>Artificial Coral Reef Design and Methodology</td>
</tr>
<tr>
<td>Dongyu Wang</td>
<td>Atmospheric Processing of Alkanes in Polluted Environments</td>
</tr>
</tbody>
</table>

## Fossil Fuels & Byproducts

<table>
<thead>
<tr>
<th>Student</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behzad Changalvaie</td>
<td>Nanotechnology in Sub-Surface Exploration: Developing a New Technique to Image Oil Reservoirs via Advanced Functional Iron Oxide Nanoparticles</td>
</tr>
<tr>
<td>Pooneh H. Noosheri</td>
<td>Modeling CO2 Partitioning at a Carbonate CO2-EOR Site: Permian Basin Field (SACROC Unit)</td>
</tr>
<tr>
<td>Yusuf Nasir</td>
<td>A Derivative-Free Memetic Algorithm for Joint Well Placement and Control Optimization</td>
</tr>
<tr>
<td>Shehab Alzobaidi</td>
<td>Carbon Dioxide in Oil Emulsions Stabilized with Silicone-Alkyl Surfactants for Sustainable Waterless Hydraulic Fracturing</td>
</tr>
</tbody>
</table>

## Renewable Energy & Energy Storage

<table>
<thead>
<tr>
<th>Student</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joannah Otashu</td>
<td>Grid-Level &quot;Battery&quot; Operation of Chemical Processes with Engagement in Short-Term Electricity Markets</td>
</tr>
<tr>
<td>Chi-Hao Chang</td>
<td>Oligoanilines as a Suppressor of Polysulfide Shuttling in Lithium-Sulfur Batteries</td>
</tr>
<tr>
<td>Alon Kirschner</td>
<td>Fouling-resistant ultrafiltration membranes prepared via co-deposition of dopamine/zwitterion composite coatings</td>
</tr>
<tr>
<td>Lingqing Yan</td>
<td>Intensification of hydrogen generation via periodic operation</td>
</tr>
<tr>
<td>Arkasama Bandyopadhyay</td>
<td>Forecasting 4 coincident peak loads and payments for a utility within ERCOT in response to varying amounts of solar energy and storage capacity</td>
</tr>
<tr>
<td>Morgan Kelley</td>
<td>Demand response operation of air separation units with an efficient MILP modeling framework</td>
</tr>
<tr>
<td>Kenta Kawashima</td>
<td>NH3-assisted flux-coating fabrication of SrNbO2N crystal layers for photoelectrochemical water oxidation</td>
</tr>
<tr>
<td>Melissa Meyerson</td>
<td>The Effect of Lithium Surface Impurities on Dendrite Growth in Lithium-Metal Batteries</td>
</tr>
<tr>
<td>Jie Lin</td>
<td>Self-Assembled Cu-Sn-S Nanotubes with High (De) Lithiation Performance</td>
</tr>
<tr>
<td>Taizhi Jiang</td>
<td>Enhanced cycling life of Li metal anodes by a germanium nanowire coating layer</td>
</tr>
<tr>
<td>Yang Liu</td>
<td>WO3 Based Tandem Cell Solar Water Splitting</td>
</tr>
<tr>
<td>Bryan Wygant</td>
<td>Probing the Enhanced Stability of 2D Perovskite Solar Cell Materials</td>
</tr>
<tr>
<td>Joshua Pender</td>
<td>Highly Compressible Reduced Graphene Oxide/Poly (Acrylic Acid) Aerogels as 3D Current Collectors for Lithium-ion Batteries</td>
</tr>
</tbody>
</table>
### Tuesday, January 30

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:30 – 8:30</td>
<td>Registration</td>
</tr>
<tr>
<td>8:30 – 8:45</td>
<td>Opening Remarks</td>
</tr>
<tr>
<td>8:45 – 9:30</td>
<td>Keynote Address: Alison Silverstein, “Power System Reliability, Resiliency and Values”</td>
</tr>
<tr>
<td>9:30 – 10:30</td>
<td>Panel 1: Grid of the Future – Balancing Diversification and Reliability</td>
</tr>
<tr>
<td>10:30 – 11:00</td>
<td>Quick Chat: Achieving the Possible – Georgetown, TX Quest for 100% Renewable Energy</td>
</tr>
<tr>
<td>11:00 – 12:15</td>
<td>Panel 2: Hold Fast – Resilient Infrastructure and Protecting against the Worst Case Scenario</td>
</tr>
<tr>
<td>11:15 – 12:15</td>
<td>Lunch Keynote: Rob Spillar, “Case Study – Austin Smart Mobility Roadmap”</td>
</tr>
<tr>
<td>12:15 – 1:15</td>
<td>Panel 3: Novel Systems for Integrated Transportation – An Austin, TX Smart Mobility Roadmap Case Study</td>
</tr>
<tr>
<td>2:30 – 3:30</td>
<td>Panel 4: Market Dynamics and the Tipping Point for Alternative Transport</td>
</tr>
<tr>
<td>3:30 – 3:45</td>
<td>Closing Remarks</td>
</tr>
<tr>
<td>4:00 – 5:00</td>
<td>UT Energy Tours</td>
</tr>
</tbody>
</table>

### Wednesday, January 31

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:30 – 8:45</td>
<td>Registration</td>
</tr>
<tr>
<td>8:45 – 9:00</td>
<td>Opening Remarks</td>
</tr>
<tr>
<td>9:00 – 9:45</td>
<td>Keynote Address: Thomas Schuessler, “Energy Outlook”</td>
</tr>
<tr>
<td>9:45 – 10:45</td>
<td>Panel 1: Energy Geopolitics and Impacts to Critical Supply Chains</td>
</tr>
<tr>
<td>11:00 – 12:15</td>
<td>Panel 2: Innovation in Oil &amp; Gas: Impacts of Digitalization on Operations</td>
</tr>
<tr>
<td>12:15 – 1:45</td>
<td>Panel 3: Natural Gas’ Future as a Versatile Global Commodity</td>
</tr>
<tr>
<td>2:00 – 3:15</td>
<td>Panel 4: Market Dynamics and the Tipping Point for Alternative Transport</td>
</tr>
<tr>
<td>3:15 – 3:30</td>
<td>Farewell Remarks</td>
</tr>
</tbody>
</table>

### Thursday – Friday, February 1 – 2: TJOGEL

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00 – 10:00</td>
<td>Railroad Commission of Texas Update</td>
</tr>
<tr>
<td>10:00 – 11:00</td>
<td>Your Brain on Ethics: How that Thing Between Your Ears Can Lead You Astray</td>
</tr>
<tr>
<td>11:00 – 12:00</td>
<td>When Kings, Queens, and Minerals Are Not Royalty</td>
</tr>
<tr>
<td>12:00 – 1:00</td>
<td>Lightning Oil Company v. Anadarko E&amp;P Onshore: What Does it Mean for E&amp;P Companies?</td>
</tr>
<tr>
<td>1:00 – 2:00</td>
<td>Midstream Joint Ventures: Common Structures, Issues, and Pitfalls in the Midstream Space</td>
</tr>
<tr>
<td>2:00 – 3:00</td>
<td>Negotiating Oil &amp; Gas M&amp;A Transactions: Zealous Advocacy Without Crossing the Ethical Line</td>
</tr>
<tr>
<td>3:00 – 4:00</td>
<td>Blood &amp; Oil: Strategies for Mineral Co-tenancy Disputes in Texas</td>
</tr>
<tr>
<td>4:00 – 5:00</td>
<td>Recent Developments in Mineral Lien Laws</td>
</tr>
<tr>
<td>5:00 – 7:00</td>
<td>Reception and Announcement of Poster Competition Awards</td>
</tr>
<tr>
<td>7:30 – 8:30</td>
<td>Registration</td>
</tr>
<tr>
<td>8:30 – 8:45</td>
<td>Opening Remarks</td>
</tr>
<tr>
<td>9:00 – 9:45</td>
<td>Keynote Address: Thomas Schuessler, “Energy Outlook”</td>
</tr>
<tr>
<td>9:45 – 10:45</td>
<td>Panel 1: Energy Geopolitics and Impacts to Critical Supply Chains</td>
</tr>
<tr>
<td>11:00 – 12:15</td>
<td>Panel 2: Innovation in Oil &amp; Gas: Impacts of Digitalization on Operations</td>
</tr>
<tr>
<td>12:15 – 1:45</td>
<td>Panel 3: Natural Gas’ Future as a Versatile Global Commodity</td>
</tr>
<tr>
<td>2:00 – 3:15</td>
<td>Panel 4: Market Dynamics and the Tipping Point for Alternative Transport</td>
</tr>
<tr>
<td>3:15 – 3:30</td>
<td>Farewell Remarks</td>
</tr>
</tbody>
</table>

### Monday, January 29

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:30 – 12:00</td>
<td>Registration</td>
</tr>
<tr>
<td>12:30 – 1:30</td>
<td>Registration</td>
</tr>
<tr>
<td>1:30 – 1:45</td>
<td>Welcoming Remarks: UT Austin President Gregory Fenves</td>
</tr>
<tr>
<td>2:15 – 3:00</td>
<td>Quick Chat: Biofuels – Promising Alternative or a Broken Promise?</td>
</tr>
<tr>
<td>3:00 – 4:00</td>
<td>Panel 1: Current Applications of Energy Storage Systems and the Way Forward for At-Scale Integration</td>
</tr>
<tr>
<td>4:00 – 5:00</td>
<td>Panel 2: Blockchain’s Impact to Transactive Services in the Energy Industry</td>
</tr>
<tr>
<td>5:00 – 7:00</td>
<td>Reception and Announcement of Poster Competition Awards</td>
</tr>
<tr>
<td>7:30 – 8:30</td>
<td>Registration</td>
</tr>
<tr>
<td>8:30 – 8:45</td>
<td>Opening Remarks</td>
</tr>
<tr>
<td>8:45 – 9:30</td>
<td>Keynote Address: Alison Silverstein, “Power System Reliability, Resiliency and Values”</td>
</tr>
<tr>
<td>9:30 – 10:30</td>
<td>Panel 1: Grid of the Future – Balancing Diversification and Reliability</td>
</tr>
<tr>
<td>10:30 – 11:00</td>
<td>Quick Chat: Achieving the Possible – Georgetown, TX Quest for 100% Renewable Energy</td>
</tr>
<tr>
<td>11:00 – 12:15</td>
<td>Panel 2: Hold Fast – Resilient Infrastructure and Protecting against the Worst Case Scenario</td>
</tr>
<tr>
<td>11:15 – 12:15</td>
<td>Lunch Keynote: Rob Spillar, “Case Study – Austin Smart Mobility Roadmap”</td>
</tr>
<tr>
<td>12:15 – 1:15</td>
<td>Panel 3: Novel Systems for Integrated Transportation – An Austin, TX Smart Mobility Roadmap Case Study</td>
</tr>
<tr>
<td>1:15 – 2:15</td>
<td>Panel 3: Novel Systems for Integrated Transportation – An Austin, TX Smart Mobility Roadmap Case Study</td>
</tr>
<tr>
<td>2:30 – 3:30</td>
<td>Panel 4: Market Dynamics and the Tipping Point for Alternative Transport</td>
</tr>
<tr>
<td>3:30 – 3:45</td>
<td>Closing Remarks</td>
</tr>
<tr>
<td>4:00 – 5:00</td>
<td>UT Energy Tours</td>
</tr>
</tbody>
</table>
Tuesday, January 30

8:30 – 8:45 OPENING REMARKS

8:45 – 9:30 KEYNOTE ADDRESS: "POWER SYSTEM RELIABILITY, RESILIENCY AND VALUES"
   Alison Silverstein, Lead Technical Author of DoE Grid Reliability Study

9:30 – 10:30 PANEL 1: GRID OF THE FUTURE – BALANCING DIVERSIFICATION AND RELIABILITY
   The electricity grid is facing unprecedented pressure from the declining cost of renewables and energy storage, cheap and abundant natural gas, and increasing political and financial constraints on coal and nuclear power generation. The Grid of the Future panel aims to explore recent assessments of grid diversification, reliability, and stability. Discussion topics will include: evaluation of impacts of accelerating penetration of distributed resources, particularly solar and wind; proposed subsidies for coal and nuclear generation facilities; and the “optimal” mix of resources in a potential zero marginal fuel cost scenario.
   Wesley Cole, Forecasting and Modeling Group, NREL
   Elaina Ball, Deputy General Manager and Chief Operating Officer, Austin Energy
   Ken Ragsdale, Market Operations, ERCOT
   Ross Baldick, Professor, UT Austin Department of Electrical & Computer Engineering (Moderator)

10:30 – 11:00 QUICK CHAT: ACHIEVING THE POSSIBLE – GEORGETOWN, TX QUEST FOR 100% RENEWABLE ENERGY
   A 1-on-1 discussion between UT Energy Institute’s Dr. Fred Beach and Georgetown City Manager Jim Briggs. They will discuss the factors that led to Georgetown’s decision to be powered by 100% renewable energy. They will then discuss energy storage and Georgetown’s future energy plans.
   Jim Briggs, CEO, Georgetown Utility Systems
   Fred Beach, Assistant Director for Policy Studies, UT Austin Energy Institute (Moderator)

11:00 – 11:15 BREAK

   Dan Smith, Vice President, Electric Service Delivery, Austin Energy
   Skip Zahn, Vice President Asset Management Gulf Region, NRG Energy
   Pliny Fisk, Co-Director, Center for Maximum Potential Building Systems
   Robert Hebner, Director, Center for Electromechanics (Moderator)

12:15 – 1:15 LUNCH KEYNOTE: CASE STUDY – AUSTIN SMART MOBILITY ROADMAP
   Rob Spillar, Director of Transportation, City of Austin

1:15 – 2:15 PANEL 3: NOVEL SYSTEMS FOR INTEGRATED TRANSPORTATION – AN AUSTIN, TX SMART MOBILITY ROADMAP CASE STUDY
   How can ridesharing, autonomous vehicles, and electrified transport options integrate into existing transportation infrastructure? What new models or systems are needed to make this transition a reality? How can we capture the impact on energy consumption?
   Chandra Bhat, Director, Center for Transportation Research
   Aaron Fox, General Manager for Central Texas, Lyft
   Jeruld Weiland, Managing Director, Rocky Mountain Institute (RMI)
   Todd Davidson, Research Associate, UT Austin Energy Institute (Moderator)

TUESDAY SCHEDULE CONTINUES ON NEXT PAGE
Tuesday, January 30

TUESDAY SCHEDULE, CONTINUED

2:15 – 2:30 BREAK

2:30 – 3:30 PANEL 4: MARKET DYNAMICS AND THE TIPPING POINT FOR ALTERNATIVE TRANSPORT

Where/when will a tipping point be reached in the mass adoption of EVs? What are the implications for the automotive industry and/or O&G community as this market transition occurs? What are market trends for alternative transport options in the rail, aviation, and shipping segments?

David Raney, Corporate Manager – Regulatory Affairs and Powertrain Planning, Toyota Motor Sales
Alex Keros, Smart Cities Chief for Maven
Alan Lloyd, Research Fellow, UT Austin Energy Institute (Moderator)

3:30 – 3:45 CLOSING REMARKS

4:00 – 5:00 TOURS:
MAKER STUDIO
UT AUSTIN POWER PLANT
UT STADIUM SUSTAINABILITY

At the conclusion of the sessions, volunteers will lead tour participants from the Alumni Center to the tour locations. Space is limited and available first-come, first-served.

UT Energy Tours • Affiliated Events

MAKER STUDIO TOUR

It all started with a 1,700sf room in 2014. Soon, it became a prototype for the system of labs and classrooms that now spans more than 30,000sf in the EERC and ETC buildings. The rooms are organized around the design process and include equipment for creating a wide array of electronics systems and mechanical devices. The program offers training and certification for labs and machines, support for product development and competition teams, and resources for integrated education including the development of complete courses.

UT AUSTIN POWER PLANT TOUR

The Carl J. Eckhardt Combined Heating and Power Complex is often described as the largest and most integrated microgrid in the U.S. The University of Texas at Austin campus features a Combined Heat and Power plant (CHP) with a 135 MW power capacity and 1.2 million lb/hr steam generation capacity. It provides 100% of the electricity and heating for the university’s main campus. This includes 4 chilling stations and a 4 million gallon chilled water thermal storage tank that provides the cooling requirements for 18 million square feet. Connections to the City of Austin electrical grid exist only for emergency backup, providing the university independence in generating all utilities required for a campus the size of a small city. Please join us for this informational, behind the scenes tour of one of the largest microgrids in the nation. The UT Power Plant Expansion Building (PPE) is located at 2401 San Jacinto Boulevard, 78705.

NOTE: Power Plant Tour attendees should wear closed-toe shoes and long pants.

UT STADIUM SUSTAINABILITY TOUR

Learn how Longhorns are meeting the challenge to "Bleed Orange, Live Green" and contributing to The University of Texas at Austin’s goal of being zero-waste campus-wide by 2020.

AFFILIATED EVENTS

UT LAW CLE: 2018 RENEWABLE ENERGY LAW, JAN 29-30, 2018

Join leading attorneys and industry experts in wind, solar and storage for two days of the latest developments affecting renewable energy in Texas and nationwide. The Renewable Energy Law Conference blends law, economics, technology, finance, tax and regulatory policy, and is aimed at industry participants, legal and financial advisors, and key legislative and regulatory policymakers and staff. https://utcle.org/conferences/WE18

ENERGY OLYMPIAD, JAN 27 & FEB 3

Longhorns from all disciplines will collaborate and develop innovative solutions to transform the UT community. http://energyolympiad.com
Wednesday, January 31

8:45 – 9:00 OPENING REMARKS

9:00 – 9:45 KEYNOTE ADDRESS: "Energy Outlook"
Thomas Schuessler, President, ExxonMobil Upstream Research Company

9:45 – 10:45 PANEL 1: ENERGY GEOPOLITICS AND IMPACTS TO CRITICAL SUPPLY CHAINS
Energy has always had a central role in geopolitics. The geographical disposition of energy and related supply chains define some of the most challenging international issues of our time. Our panelists will discuss key friction points from several perspectives. They will explore tensions between Europe and Russia in regards to LNG, energy reforms in Latin America, territorial disputes in the South China Sea, and Mid-East oil diplomacy.

Dale Bradford, VP Worldwide Drilling & Services, Murphy Oil
Matthew Bey, Senior Global Analyst, Stratfor
Luc Boyer, French Economic Consul
Michael Mosser, Professor, UT Austin Department of Government (Moderator)

10:45 – 11:00 BREAK

11:00 – 12:15 PANEL 2: INNOVATION IN OIL & GAS: IMPACTS OF DIGITALIZATION ON OPERATIONS
With the reduced price of oil, as well as oil companies operating in hotter, deeper and ‘new’ geologic formations, how is the industry innovating? What technologies, analysis and methods are being utilized to turn resources into reserves, optimizing well locations and operating strategies, and replacing fundamental reservoir models with data analytics. How is the sector moving forward to ‘Peak Demand’ and beyond?

Eric Van Oort, Professor, UT Austin Department of Petroleum and Geosystems Engineering
James Courtier, Vice President Exploration & Geosciences Technology, Laredo Petroleum Inc.
David Castañeira, VP, Quantum Technologies | VP, Automation, Quantum Reservoir Impact LLC (QRI)
Tom Edgar, Director, UT Austin Energy Institute (Moderator)

12:15 – 1:45 LUNCH KEYNOTE: "Economic growth and the environment: what are the tradeoffs?"
Sheila Olmstead, Professor, UT Austin LBJ School of Public Affairs

1:45 – 2:00 BREAK

2:00 – 3:15 PANEL 3: NATURAL GAS’ FUTURE AS A VERSATILE GLOBAL COMMODITY
The last decade has seen remarkable production gains for natural gas, particularly in North America, precipitating a reversal from net importer to net exporter for the United States. Other nations have also achieved historical natural gas production levels, such as Australia, Qatar, Russia, and even Egypt, creating a supply glut and likely persistent low-price environment. This panel seeks to discuss the role of natural gas as an increasingly global commodity in both the power generation and transportation sectors. Discussion topics will include: realistic projections of supply and demand in the context of low prices and tempered GDP growth outlooks; the role of natural gas in both domestic and international power markets as coal use continues to diminish and pressure from renewables increases; and the evolving LNG market’s role in providing flexible, responsive, and price-competitive natural gas to an increasingly global customer base.

Corey Grindal, VP of Supply, Cheniere
Jason Feer, Head of Business Intelligence, Poten & Partners
Brent Faulk, VP Natural Gas Trading, Chevron
Carey King, Assistant Director, UT Austin Energy Institute
Richard Chuchla, Director, UT Austin Energy and Earth Resources Program (Moderator)

3:15 – 3:30 FAREWELL REMARKS
THURSDAY

9:00 – 10:00  RAILROAD COMMISSION OF TEXAS UPDATE
Brian R. Sullivan, McElroy, Sullivan, Miller, Weber and Olmstead

10:00 – 11:00  YOUR BRAIN ON ETHICS: HOW THAT THING BETWEEN YOUR EARS CAN LEAD YOU ASTRAY
Moderator: Jonathan M. Smaby, Texas Center for Legal Ethics
Kevin Dubose, Alexander Dubose Jefferson & Townsend
Beverly B. Godbey, Gardere Wynne Sewell
Prof. Robert Prentice, McCombs School of Business, University of Texas

11:00 – 12:00  WHEN KINGS, QUEENS, AND MINERALS ARE NOT ROYALTY
Richard B. Hemingway, Jr., Thompson & Knight

12:00 – 1:00  LIGHTNING OIL COMPANY V. ANADARKO E&P ONSHORE: WHAT DOES IT MEAN FOR E&P COMPANIES?
Jason Newman and Cornelius M. Sweers, Baker Botts

1:00 – 2:00  MIDSTREAM JOINT VENTURES: COMMON STRUCTURES, ISSUES, AND PITFALLS IN THE MIDSTREAM SPACE
Chad M. Smith, Jeffrey S. Muñoz, Michael R. King, and Stephen C. Szalkowski, Latham & Watkins

2:00 – 3:00  NEGOTIATING OIL & GAS M&A TRANSACTIONS: ZEALOUS ADVOCACY WITHOUT CROSSING THE ETHICAL LINE
Jonathan Ayre, Orrick, Herrington & Sutcliffe

3:00 – 4:00  BLOOD & OIL: STRATEGIES FOR MINERAL CO-TENANCY DISPUTES IN TEXAS
Caleb A. Fielder

4:00 – 5:00  RECENT DEVELOPMENTS IN MINERAL LIEN LAWS
Brian Mitchell, Bracewell
Tom McNutt, Pardus Oil & Gas

FRIDAY

9:00 – 10:00  ENERGY & ENVIRONMENTAL REGULATORY REPORT & FORECAST
Michael J. Nasi, Jackson Walker

10:00 – 11:00  ETHICS UPDATE
Alexander C. Schoch, Railroad Commission of Texas

11:00 – 12:00  LEGISLATIVE UPDATE: SUMMARIES OF KEY OIL & GAS LEGISLATION IN THE 85TH (2017) LEGISLATIVE SESSION
Benjamin W. Sebree, The Sebree Law Firm

12:00 – 1:00  THIS LAND IS YOUR LAND, THIS LAND IS MY LAND: FARMOUT AGREEMENTS IN BANKRUPTCY
Lydia R. Webb and Philip B. Jordan, Gray Reed & McGraw

1:00 – 2:00  OFFSHORE DECOMISSIONING: A COMPARATIVE APPROACH
Felipe Alice, Morgan, Lewis & Bockius

2:00 – 3:00  UPSTREAM/MIDSTREAM UPDATE: PRODUCER MIDSTREAM JVS AND DRILLCOS UNDER REVIEW
Bryan E. Loocke, Vinson & Elkins

3:00 – 4:00  JOIN US FOR COOKIES AFTER THE SYMPOSIUM