



— T E X A S —  
ENERGY COUNCIL



T E X A S E N E R G Y C O U N C I L  
P E R M I A N S Y M P O S I U M

PERMIAN BASIN PETROLEUM MUSEUM  
MIDLAND, TEXAS

N O V E M B E R 8 , 2 0 2 3

**AGENDA**

- 1:30 PM      **REGISTRATION**
- 2:00 PM      **WELCOME:** *Buffie Campbell, President, Texas Energy Council*  
*Clinton Butler, President, Texas Chapter of National Association of Royalty Owners*
- 2:10 PM      **SPEAKER: Omar Garcia**  
*Chief of External Affairs, Port of Corpus Christi*  
***New Energy Challenges to the Port of Corpus Christi***
- 2:40 PM      **SPEAKER: Dr. Lorena Moscardelli**  
*Research Scientist, and leader of the State of Texas Advanced Resource Recovery (STARR) program, Bureau of Economic Geology*  
***The Emerging Hydrogen Economy: Texas Challenges & Opportunities***
- 3:10 PM      **SPEAKER: Luke Dunn**  
*Vice President of Engineering & Operations, CrownQuest Operating*  
***Electricity in Texas: Power from an Oil & Gas Producer's Perspective***
- 3:40 PM      15 MINUTE BREAK
- 3:55 PM      **SPEAKER: Michael Cooper, Texas Energy Council Education Initiative**  
**Jason Isaac, *Life: Powered & Classroom: Powered***
- 4:10 PM      **SPEAKER: Steve Melzer**  
*President, Melzer Consulting*  
***The Two Very Different Types of CO2 Storage***
- 4:40 PM      **SPEAKER: Jimmy Wright**  
*President, JDub Enterprises*  
***Diverse Perspectives: What Operators and Mineral Owners Should Know About Each Other***
- 5:10 PM      ADJOURN for Networking Happy Hour

# T E X A S E N E R G Y C O U N C I L P E R M I A N S Y M P O S I U M

PERMIAN BASIN PETROLEUM MUSEUM  
MIDLAND, TEXAS

N O V E M B E R 8 , 2 0 2 3

## PROGRAM OF SPEAKERS

**Omar Garcia**, *Chief of External Affairs, Port of Corpus Christi*

**Bio:** An experienced leader in the energy sector, Omar Garcia is the Chief External Affairs Officer for the Port of Corpus Christi, which is the United States' largest port in total revenue tonnage as well as its leading crude oil export gateway.

In his role, Garcia liaises between Port executive leadership and the public advocacy groups, local and national elected officials, business leaders, community members and regional stakeholders. He manages all external affairs for the Port and is responsible for oversight and guidance of Government Affairs, Public Affairs, Communications, Trade Development and Community Relations.

Prior to joining the Port of Corpus Christi in 2018, Garcia served as the Chief Executive Officer of the South Texas Energy & Economic Roundtable (STEER), where he facilitated communication, education and public advocacy surrounding the production of energy resources in South Texas.

Garcia is a former vice president of the San Antonio Economic Development Foundation and has more than 12 years of economic development experience, including positions with the Texas Governor's Office, TIP Strategies, Corpus Christi Regional Economic Development and the City of San Antonio's Economic Development Department. Garcia's lengthy career also includes two years with Bank of America, where he served as Vice President of Business Development for the Treasury Management division.

A native of Kingsville, Texas, Garcia is highly skilled in developing public and economic policy, having been appointed in 2010 to the Texas Economic Development Corporation by then Governor Rick Perry. Garcia holds a degree in International Business and Spanish from St. Edwards University and is a certified economic development finance professional through the National Development Council.

### ***New Energy Challenges to the Port of Corpus Christi***

Port of Corpus Christi Chief External Affairs Officer Omar Garcia will present an illuminating perspective from a traditional oil and gas port that has grown to be the number one U.S. energy export gateway by embracing innovative technologies and cleaner fuels. The Port of Corpus Christi is marshaling change in the energy community, adding jobs and enhancing resilience in America's seaports.

\*\*\*\*\*

**Dr. Lorena Moscardelli**, *Research Scientist, and leader of the State of Texas Advanced Resource Recovery (STARR) program, Bureau of Economic Geology*

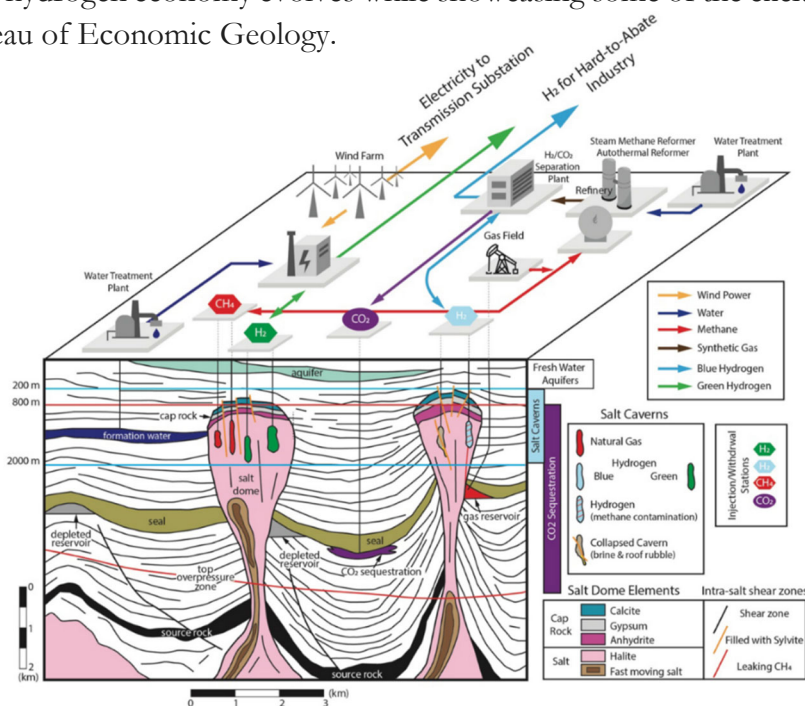
**Bio:** Dr. Lorena Moscardelli is a Research Scientist and leader of the State of Texas Advanced Resource Recovery (STARR) program at BEG. Her expertise is in seismic geomorphology and interpretation, sedimentology and stratigraphy and geoscience data integration. She received a degree in Geological Engineering from Central University of Venezuela (2000) and a PhD in Geological Sciences from The University of Texas at Austin (2007).

She specializes in the study of deep-water deposits with emphasis on subaqueous landslides, deep-water mixed siliciclastic-carbonate systems and planetary geology. She started her career as an exploration geologist working for PDVSA (2000 – 2003). Prior to her current position at STARR, Dr. Moscardelli was a Principal Researcher at Equinor (2013 – 2021) where she performed a wide range of activities from research in the Americas to field development in the Norwegian Continental Shelf. Her BEG career includes the co-funding and co-direction of the Quantitative Clastic Laboratory (QCL) (2007-2013) and her actual involvement as leader of STARR.

Most recently, Dr. Moscardelli has taken a strong interest in understanding the role of geoscience research as part of the ongoing energy transition while contributing to STARR’s main mission of conducting geologic research resulting in the increase of production and profitability of energy resources in the State of Texas.

### *The Emerging Hydrogen Economy: Texas Challenges & Opportunities*

The shift in energy consumption from fossil-based fuels to renewable energy is reshaping the fabric of our energy systems. Hydrogen, a known energy carrier, can be used to help society bridge the gap between fossil fuels and renewable energies. A viable hydrogen economy requires development of a value chain that includes several critical factors: 1) access to feedstock such as natural gas, water, renewable energy, natural sources of hydrogen, etc., 2) a production method that includes but it’s not limited to electrolysis or steam methane reforming, 3) above ground storage, as well as geological storage methods, 4) transportation via pipelines, trucking, etc., and 5) a robust market. In this talk, Dr. Moscardelli will touch on some of the challenges and opportunities that Texas faces as the emerging hydrogen economy evolves while showcasing some of the exciting research that is currently underway at the Bureau of Economic Geology.



# TEXAS ENERGY COUNCIL PERMIAN SYMPOSIUM

\*\*\*\*\*

**Luke Dunn**, *Vice President of Engineering & Operations, CrownQuest Operating*

**Bio:** Mr. Dunn has worked at CrownQuest since 2006. Prior to that, Mr. Dunn worked as a production engineering for Occidental Petroleum after graduating from Texas Tech University with a Bachelor of Science degree in Petroleum Engineering in 2003. Mr. Dunn is also a Licensed Professional Engineer in the State of Texas.

## ***Electricity in Texas: Power from an Oil & Gas Producer's Perspective***

Electricity is a marvel that makes modern life possible. The Texas electric grid is a unique and largely independent power system within the United States but not regulated by federal authorities. With the changes in technology, population, and markets the past several years the Texas grid electric grid has undergone significant changes. This talk covers the basics on how electricity works and how it effects oil and gas production in Texas.

\*\*\*\*\*

**Steve Melzer**, *President, Melzer Consulting*

**Bio:** Steve Melzer is a consulting engineer in Midland, Texas specializing in CO2 injection projects, enhanced oil recovery (EOR), reservoir properties, secure geologic storage, and horizontal well reservoir depressuring projects. He also provides engineering and business planning services for a variety of U.S. and International commercial clients in the oil and gas, industrial gas, coal and power sectors as well as advising policy makers and non-governmental organizations on the subject of CO2 EOR and carbon capture and storage. He has also originated and operated many exploration and production projects in the oil and gas sector. His landmark work on the origin and distribution of residual oil zones (ROZ) has led to their commercial exploitation through the use of both CO2 EOR and horizontal wells and coming utilization in carbon capture and storage. The ROZ work has also led to a team of folks currently documenting a new contribution and science-based explanation of mixed- and oil-wettability in carbonates and certain clastic reservoir rocks.

He has been the director of the 28 years of the annual CO2 Flooding Conference and assists in organizing the EOR Carbon Management Workshop, both held each year in December in Midland, Texas. He has served on the Governor of Texas' FutureGen Board, as a past Director of The University of Texas of the Permian Basin's Petroleum Industry Alliance, Plains CO2 Reduction's and Wyoming's Enhanced Oil Recovery Institute technical advisory board and continues to serve on several other out of state and local Advisory Boards and Councils.

Steve resides in Midland, Tx. He has a BS in geological engineering from Texas A&M and a MS degree in Engineering (Rock Mechanics) from Purdue University.

*The Two Very Different Types of CO2 Storage*

The fast-growing Worldwide movement to reduce emissions has created both incentives and taxes to promote emissions capture. The path chosen by the U.S. is a generous “carrot” as contrasted by the tax or “stick” approach used in some other countries. This is leading to over 300 industrial plant projects that are taking advantage and in a design feasibility stage with the intent to capture their carbon dioxide emissions. Of course, the financial goals of capturing emissions are necessarily followed by a search for their permanent, sequestered home. Deep underground storage is the preferred approach due to the need for large volumes of storage.

The oil and gas industry has a long-proven record of storage of CO2 showing that it is both feasible and permanent via their CO2 enhanced oil recovery (CO2 EOR) operations. In particular, the Permian Basin industry has led the world since 1972 with the pioneering SACROC flood and now with 76 currently active projects. We estimate 15 trillion cubic feet of CO2 rests permanently in the mature Permian Basin oilfields while having produced 2 billion barrels of oil.

But there is another way to store carbon underground; its analog is large volume water disposal. This method does not require an oil field nor does it remove fluids to make room for the injected carbon dioxide. Most States say the rights to do this lie with the surface owner. Thus, future carbon capture and geologic storage has a fork in its road: 1) using CO2 EOR where CO2 has value, mineral rights dominate, oil is produced, and can be done under UIC Class II wells and 2) where surface rights control, CO2 is a waste, with UIC Class VI rules imposed, and disposal is the appropriate descriptor. Both need to be large volume storage; the first has a long-proven track record while producing oil to make pore space room for the stored CO2 while the second will not involve production thus increasing reservoir pressures; much like what is happening with large volume water disposal.

It is appropriate to say that neither approach is risk free. Old fields need to demonstrate that old wells have integrity and wellbores will not leak. CO2 disposal may have some of the same issues with old wells but most targeted areas are far from drilled regions. The remote locations lead to different risks; the regions lack the kind of reservoir understanding that the oil and gas industry has gained through the years. Additionally, buoyant fluid trapping has not been demonstrated.

This presentation will provide a look at the accelerating worldwide momentum for carbon capture and storage. It will also demonstrate the enormous volumetric challenges along with the pros and cons involved in each of the two approaches being considered to securely store the industrially captured, by-product CO2.

\*\*\*\*\*

**Jimmy Wright**, *President, JDub Enterprises*

**Bio:** Mr. Wright graduated from Southwestern University in Georgetown, Texas with degrees in Spanish and Political Science. After a tour with the United States Army, he began his career as an independent landman in 2004. He has served in many capacities since then, including land manager and executive level leadership for multiple oil and gas operators.

# T E X A S E N E R G Y C O U N C I L P E R M I A N S Y M P O S I U M

He holds an MBA with a focus in Land Management and received both his Certified Professional Landman (CPL) and Certified Mineral Manager (CMM) designations in 2011. Mr. Wright has volunteered in various leadership roles within the American Association of Professional Landmen (AAPL), the National Association of

Royalty Owners (NARO), the Permian Basin Landmen's Association (PBLA), and the Austin Professional Landmen's Association (APLA).

Mr. Wright was recently honored to have been named as the 2023 Landman of the Year by the AAPL.

A west Texas native, Mr. Wright and his wife, Laura, have two precious teen daughters, Anna and Megan. They enjoy traveling and playing board games as a family.

## ***Diverse Perspectives: What Operators and Mineral Owners Should Know About Each Other***

Jimmy Wright has represented operators and mineral owners throughout his long career, even recently stepping in as the interim Executive Director of the National Association of Royalty Owners and being selected as the 2023 AAPL Landman of the Year. The relationship between operators and mineral owners is the most critical partnership in the oil and gas industry. Although their interests appear to often be at odds with each other, the two groups have more in common than often believed. Jimmy will dive into each of these groups' perspectives related to the "hot button" topics that they wish each other understood better. The ultimate goal is for the audience to come away with a better understanding of how they can improve their relationship with each other.