



April 9-13, 2016, Tulsa, Oklahoma

TWENTIETH SPE IMPROVED
OIL RECOVERY CONFERENCE

IOR 2016

NEW CHALLENGES, NEW SOLUTIONS



Dewey F. Bartlett, Jr.
OFFICE OF THE MAYOR



Welcome to Tulsa!

As Mayor of the City of Tulsa, it is my pleasure to welcome you to our vibrant city. Tulsa is proud to once again host the 20th Improved Oil Recovery Symposium, at the Cox Business Center in downtown Tulsa.

I am especially happy to welcome all of you to our city because your industry provided the foundation for Tulsa's growth. We are proud to continually promote and celebrate such a vital industry. And, if you didn't know, you are from the industry that I have worked in and supported my family for all of my life.

During your stay in Tulsa, I hope you will take the time to enjoy our beautiful sights, such as Woodward Park and River Parks. Take in the city's rich history, seen in the stately midtown mansions and unsurpassed examples downtown of Art Deco architecture built by the fortunes of famed oil men.

Tulsa also offers unique shopping, dining, and cultural opportunities. Among them are the world-class Gilcrease Museum of Western Art and Philbrook Museum of Art. Enjoy waterfront dining on the Arkansas River after visiting the Oklahoma Aquarium. Visit the awe-inspiring attractions at the Tulsa Air & Space Museum & Planetarium. Minutes away from downtown is the legendary Utica Square, an upscale outdoor shopping and dining center. Across town is the Woodland Hills/71st Street shopping area, one of the largest concentrations of retail and dining establishments in the state.

Come downtown and see how the Brady Arts and Blue Dome districts are being revitalized, bristling with new urban residential development, restaurants, night clubs, and entertainment venues such as the historic Cain's Ballroom, birthplace of Western swing music and one of the top club venues in the world. Also nearby are the Cherry Street and Brookside areas, humming with night life and eateries.

The crown jewel of Tulsa's entertainment scene is the new BOK Center, designed by César Pelli, of Petronas Towers fame. The BOK Center has captured international attention, attracting top music tours, from Paul McCartney to Justin Timberlake. Or if you're a baseball fan, come see ONEOK Field, the new downtown home of the Tulsa Drillers, who will be playing home games the week of IOR 2016.

Enjoy your visit and take time to discover some of Tulsa's many treasures. I send my best wishes for a successful event and encourage future visits to the Tulsa community.

Again, welcome to Tulsa.

Best regards,

Dewey F. Bartlett, Jr.

TULSA: THE DYNAMIC CITY THAT OIL BUILT



A view of the daytime Tulsa skyline seen from the west bank of the Arkansas River, part of Tulsa's extensive River Parks system. Photo by Don Sibley. Copyright ©2010 by Don Sibley.

Oil built the vibrant, dynamic city that is Tulsa today.

For decades it was known as the “Oil Capital of the World.”

The famed Glenn Pool strike and other oil discoveries nearby had turned a small, rough-and-ready Indian Territory cattle crossroads—first founded as a Creek Indian settlement—into a cosmopolitan hub of more than 72,000 residents by 1920.

Legendary names in oil industry history—Getty, Phillips, Skelly, Cosden, Warren, Helmerich—built vast fortunes that helped shape a skyline that today boasts one of the world's most architecturally significant collections of Art Deco buildings. Oil barons also built many stunning mansions that dot historic midtown neighborhoods such as Maple Ridge and Swan Lake. And they built an impressive legacy of philanthropy, helping to fund the development of universities, museums, hospitals, parks, and countless other community assets in Tulsa.

Tulsa was the center of the oil universe for 56 years as the host of the International Petroleum Exposition, bringing together industry professionals from all over the world.

Oil wealth also underwrote much of Tulsa's rich cultural tradition, with a world-class ballet company, symphony, opera, theater, and art. Two internationally recognized museums in Tulsa were the gifts of legendary oilmen: Thomas Gilcrease and Waite Phillips. Gilcrease Museum houses the world's



World-renowned Chiricahua Apache sculptor Allan Houser's masterpiece, the bronze sculpture Sacred Rain Arrow, greets visitors to the entrance of the Gilcrease Museum complex. Photo by Don Sibley. Copyright ©2010 by Don Sibley.

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Philbrook is an Italian-style villa that was once Phillips's home and that today is home to a lavish museum and spectacular gardens filled with Italian Renaissance art, modern art, and extensive Native American collections.

While its “oil capital” title has been relinquished due to the petroleum industry's changing demographics, energy still plays a vital role in Tulsa's economy and community life. Oil- and gas-related companies such as Williams Cos., Unit Corp., ONEOK, Helmerich & Payne, and a host of small and midsized independent producers, drilling contractors, and oil and gas service and supply companies call Tulsa their home. More than 600 energy-related companies have offices in the Tulsa area.

For a handy guide to entertainment, dining, and events of special interest in Tulsa during IOR Conference week, check out the Tulsa World's Calendar site at www.tulsa-world.com/site/calendar.

Or browse through this visitor's guide to Tulsa at www.visit-tulsa.com/vguide/?vgID=4.

And here's a handy guide to things to do and see in downtown Tulsa, all a stone's throw from the Cox Business Center and Doubletree Hotel: <http://downtowntulsaok.com>.

High-tech businesses make their home in Tulsa as well, befitting a city where Williams Cos. pioneered the installation of fiber optic cable in unused pipelines. University-related research in medicine, advanced energy technologies, and nanotechnology abounds in the area.

Tulsa is also a shopper's haven, from the exclusive shops and restaurants at Utica Square near downtown, to the vast sprawl of retail outlets and eateries in the Woodland Hills shopping area of south Tulsa.

The lush, green, rolling hills of Tulsa offer opportunities for outdoors enthusiasts, from the jogging, disc golf, rugby, and rowing seen along the extensive River Parks system bounding the mighty Arkansas River, to



The Italianate villa that once was oil baron Waite Phillips's home overlooks the gardens at Philbrook Museum. Photo by Don Sibley. Copyright ©2010 by Don Sibley.

But Tulsa's business scene has diversified to encompass other industries, notably aerospace, telecommunications, insurance, finance, health care, machinery, and a wide range of manufacturing enterprises.

Tulsa's key role in aviation during and after World War II—and its continuing strong presence in aircraft manufacture, maintenance, and pilot training—has left a legacy that can be traced in the historic exhibits featured at the Tulsa Air & Space Museum, which also houses a state-of-the-art planetarium. More than 71 aerospace companies have offices in Tulsa.



Tulsa's aviation and aerospace legacy is enshrined at the Tulsa Air & Space Museum near the Tulsa International Airport. Photo by Don Sibley. Copyright ©2010 by Don Sibley.

world-class golf courses such as Southern Hills Country Club, occasional host to PGA tournaments. The city also hosts professional teams in baseball, basketball, ice hockey, and soccer. Special world-class sporting events drawing from far and near include the Bassmasters Classic and the Tulsa Tough bicycle race.

Sporting types—of the sort interested in games of chance—have the opportunity to take in the many huge Indian casinos in the area, as well as horse racing at Fair Meadows adjoining Expo Square in midtown. Expo Square is also home to the giant Golden Driller statue, an icon commemorating Tulsa's oil history at the former IPE building.

Perhaps Tulsa's best asset is the warmth and hospitality visitors encounter. The rich mix of heritages that come from having been an Indian settlement, cowtown, oil boom town, aerospace center, and now cutting-edge technology center exemplify an accommodating yet can-do spirit. Visitors will come away wanting to come back soon—and they'll be more than welcome.

TULSA'S DOWNTOWN: GROUND ZERO FOR THE OIL CITY'S RENAISSANCE

Downtown Tulsa is undergoing a renaissance that, together with the massive parks and recreation developments planned for the nearby Arkansas River, reflects a new dynamism that this key oil and gas city hasn't seen in decades.

New entertainment venues, hotels, family-friendly festivals, sporting facilities, restaurants, arts and cultural centers, galleries, trendy boutiques, and a rapidly growing residential population mark 1.4 square miles inside the Inner Dispersal Loop (IDL) as ground zero for a night life humming with new excitement.

The rapidly growing permanent residential population in downtown Tulsa is reflected in recent reports that the number of apartments, condos, and lofts inside the IDL is expected to double from those added just since 2010.

Tulsa has stepped up its game in the world of entertainment with its crown jewel, the new BOK Center—a long-anticipated, world-class regional events center designed by world-renowned architect Cesar Pelli—in the heart of downtown. Acts ranging from Bruce Springsteen to Paul McCartney to Carrie Underwood to Elton John to Cirque du Soleil and the NBA's Oklahoma City Thunder have entertained tens of thousands at an arena that in its brief existence has already become one of the top 30 US entertainment venues in the US.

Broadway touring shows such as the Tony-winning hits *The Book of Mormon* and *Kinky Boots* have recently graced the stage to sold-out crowds at downtown's Performing Arts Center, while the century-old Brady Theater offers a more intimate experience for top club acts such as Norah Jones, Tori Kelly, Bill Maher, and Louis C.K.



Tulsa's vibrant night skyline reflected in the Arkansas River. Photo by Don Sibley. Copyright ©2010 by Don Sibley.

World-famous music venues such as the Cain's Ballroom (ranked No. 15 worldwide among club venues) and Oklahoma Jazz Hall of Fame were just the beginning of Tulsa's emergence as a major new center for American music. Building on that foundation with exceptional new draws for music scholarship are the Woody Guthrie Center and the recent acquisition of Bob Dylan's long-held "secret" archive by the George Kaiser Foundation and the University of Tulsa, to be housed in downtown Tulsa's burgeoning Brady Arts District.

A must for lovers of great historical architecture is Tulsa's collection of Art Deco buildings—from skyscrapers to private homes

to magnificent churches—that has no peer outside of New York City. Guided tours, including walking tours of downtown Tulsa's Art Deco masterpieces are available: www.visittulsa.com/things-to-do/art-deco. With so much to do and see in downtown Tulsa, conference attendees might want to consider extending their stay.



Tulsa's world-class new entertainment venue: the BOK Center. Photo courtesy of SMG.

GARY POPE TO SUB FOR LARRY LAKE AT SPE IOR 2016 PLENARY, SHORT COURSE

In a late change, IOR Pioneer Gary A. Pope will replace Dr. Larry Lake as both a plenary speaker and a short course instructor at the 20th SPE Improved Oil Recovery conference, scheduled for April 9–13, at the Cox Business Center in Tulsa, Okla.

Dr. Lake was forced to cancel due to medical issues.

In addition to stepping in for Lake to represent academia in the SPE IOR 2016 plenary session that opens the conference program on April 11, Dr. Pope will conduct the EOR Fundamentals Short Course at the Cox Business Center on Sunday, April 10.

Dr. Pope is a professor in the Department of Petroleum and Geosystems Engineering at the University of Texas at Austin, where he holds the Texaco Centennial Chair in Petroleum Engineering. He joined the UT faculty in 1977 and was elected to the National Academy of Engineering in 1999.



Pope is a specialist in reservoir engineering with a main focus on enhanced oil recovery. His teaching and research are in the areas of EOR, reservoir engineering, natural gas engineering, geological storage of CO₂, and groundwater remediation.

Pope holds a BS degree from Oklahoma State University and a PhD degree from Rice University, both in chemical engineering. He has authored or co-authored more than 300 technical papers and 7 books, including one on EOR, and holds 24 patents.

His awards include SPE Honorary Member Award, AIME Environmental Conservation Distinguished Service Award, SPE IOR Pioneer Award (2006), SPE/AIME Anthony F. Lucas Gold Medal, SPE John Franklin Carll Award, SPE Distinguished Achievement Award, SPE Distinguished Member Award, and SPE Reservoir Engineering Award.

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