

2018 Tennessee Engineers' Conference

September 16-18, 2018 | Franklin Marriott Cool Springs



Engineering a Better World

Health | Safety | Welfare

American Council of Engineering Companies of Tennessee
American Society of Civil Engineers, TN Section
Tennessee Structural Engineering Association
Tennessee Society of Professional Engineers

#TEC2018



NSPE-TN™

CONFERENCE SCHEDULE

Sunday, September 16, 2018

4:00 PM - 6:00 PM	Conference Registration Open & Exhibitor Set-Up	Registration Desk
5:00 PM- 6:30 PM	Opening Social	Conference Center

Monday, September 17, 2018

7:30 AM - 5:00 PM	Conference Registration Open	Registration Desk
8:30 AM - 10:30 AM	Plenary Session & Breakfast National Society Reports Legislative Awards Speaker: Amy Lynch Generational Edge What's Your Gen IQ? Are You Ready to Thrive?	Exhibit Hall
7:30 AM - 7:00 PM	Exhibit Hall Open	Exhibit Hall
10:30 AM - 11:00 AM	Break w/ Exhibitors	Exhibit Hall
11:00 AM - 11:50 AM	Professional Development	Track Dependent
12:00 PM - 1:20 PM	Tennessee Engineering Foundation Luncheon ASCE Awards Speaker: Dave McGinnis - Titans Radio Color Analyst	Exhibit Hall
1:30 PM - 3:00 PM	Student Competition	Williamson
1:30 PM - 5:20 PM	Professional Development	Track Dependent
2:00 PM - 3:30 PM	TEF Trustees Meeting	Saddlebred
3:10 PM - 3:40 PM	Break w/ Exhibitors	Exhibit Hall
5:30 PM - 7:00 PM	Welcome Reception <i>*Sponsored by Risk Strategies</i>	Exhibit Hall
7:00 PM - 10:00 PM	Tennessee Professional Engineers PAC Party <i>*Separate ticket required. See Kasey Anderson for information</i>	Courtyard

Tuesday, September 18, 2018

7:30 AM - 12:00 PM	Conference Registration Open	Registration Desk
7:00 AM - 3:00 PM	Exhibit Hall Open	Exhibit Hall
7:30 AM - 8:30 AM	Continental Breakfast w/ Exhibitors	Exhibit Hall
8:30 AM - 11:55 AM	Professional Development	Track Dependent
10:10 AM - 10:40 AM	Break w/ Exhibitors	Exhibit Hall
12:00 PM - 1:30 PM	PE Luncheon TSPE Awards Speaker: Ann McGauran, AIA State Architect <i>*Sponsored by Vaughn & Melton</i>	Exhibit Hall
1:40 PM - 5:05 PM	Professional Development	Track Dependent
2:30 PM - 3:00 PM	Break w/ Exhibitors	Exhibit Hall

Professional Development (Monday 9/17)

Track 1: Student Track | Location: Williamson

8:30 AM - 10:30 AM	Breakfast & Plenary Session (Exhibit Hall)
10:45 AM - 11:00 AM	Welcome Ashley Smith, PE (CDM Smith) and Wesley Goodnight (Ensafe, Inc.)
11:00 AM - 11:50 AM	Engineering a Difference in the Global Community Luke Williams, PE & Chris Loftis, PE SSR
12:00 PM - 1:20 PM	TEF Luncheon
1:30 PM - 4:00 PM	Student Competition Ashley Smith, PE (CDM Smith) and Wesley Goodnight (Ensafe, Inc.)

Track 2: Engineering Management | Location: Quarter Horse/Palomino

8:30 AM - 10:30 AM	Breakfast & Plenary Session (Exhibit Hall)
10:30 AM - 11:00 AM	Break
11:00 AM - 11:50 AM	Feeding Your Client Base: How to Keep Current Clients Coming Back for More! Deb Varallo Varallo Public Relations
12:00 PM - 1:20 PM	TEF Luncheon
1:30 PM - 2:20 PM	How to Excel as a Professional and as a Firm without Burnout Pete Atherton ActionsProve, LLC
2:20 PM - 3:10 PM	You've Made the Shortlist, Now Use Brain Science to Get the Win Jeff Echols Revenue Path Group
3:10 PM - 3:40 PM	Break
3:40 PM - 4:30 PM	Gen Z is Here and They Aren't What We Expected! Amy Lynch Generational Edge
4:30 PM - 5:20 PM	It's a Matter of (Engineering) Ethics Nicole Mangino XL Catlin

Track 3: Transportation | Location: Franklin

8:30 AM - 10:30 AM	Breakfast & Plenary Session (Exhibit Hall)
10:30 AM - 11:00 AM	Break
11:00 AM - 11:50 AM	Drones for Survey David Headrick KCI Technologies, Inc.
12:00 PM - 1:20 PM	TEF Luncheon
1:30 PM - 2:20 PM	Advanced Manufacturing and Transportation Technology Brad Rutherford Local Motors
2:20 PM - 2:45 PM	Nashville MTA Centralized Transit Signal Priority (TSP) Deployment Andy Lucyshyn, PE (Gresham, Smith and Partners) and Chris Rhodes, PE (Kimley-Horn and Associates)
2:45 PM - 3:10 PM	BNA Vision Update Traci Holton Metro Nashville Airport Authority
3:10 PM - 3:40 PM	Break

Professional Development (Monday 9/17)

Track 3: Transportation Continued Location: Franklin	
3:40 PM - 4:30 PM	Diverging Diamond & Roundabouts: How to Keep Trucking Along Meredith Cebelak, PE Gresham, Smith and Partners
4:30 PM - 5:20 PM	Bridge Movement Monitoring for BNSF Railway Bridge 482.1 West Approach Spans Replacement Over the Mississippi River Andrew Maybee, PE Fisher & Arnold, Inc.

Track 4: Electrical, Mechanical & Industrial Location: Morgan	
8:30 AM - 10:30 AM	Breakfast & Plenary Session (Exhibit Hall)
10:30 AM - 11:00 AM	Break
11:00 AM - 11:50 AM	Common Arc Myths: Fact or Fiction Tommy Northcott, PE Jacobs
12:00 PM - 1:20 PM	TEF Luncheon
1:30 PM - 2:20 PM	Arc Quenching Technology for Substations to Enhanced Safety and Reduce Arc Flash Energy Chris Finen, PE Eaton
2:20 PM - 3:10 PM	Asset Management & Designing for Reliability Ramesh Gulati, PE and Lynn Moran Jacobs
3:10 PM - 3:40 PM	Break
3:40 PM - 4:30 PM	Grounding and Bonding of Electrical Systems Mike Puckett, PE Puckett Engineering PLLC
4:30 PM - 5:20 PM	TVA Energy Right Solutions for Business and Industry

Track 5: Civil & Environmental Location: Mustang	
8:30 AM - 10:30 AM	Breakfast & Plenary Session (Exhibit Hall)
10:30 AM - 11:00 AM	Break
11:00 AM - 11:50 AM	Arthur Morgan's TVA-ASCE Legacy Barry Thacker, PE Schnabel Engineering
12:00 PM - 1:20 PM	TEF Luncheon
1:30 PM - 2:20 PM	TDEC Engineering Update George Garden, PE Tennessee Department of Environment and Conservation
2:20 PM - 2:45 PM	TDEC Division of Water Resources - Drinking Water Update David Money Tennessee Department of Environment and Conservation
2:45 PM - 3:10 PM	TDEC Division of Water Resources - Clean Water Update Jennifer Dodd Tennessee Department of Environment and Conservation
3:10 PM - 3:40 PM	Break
3:40 PM - 4:30 PM	Mountain Creek Stream Bank Restoration Project Jeff Hoilman, PE Propex GeoSolutions
4:30 PM - 4:55 PM	Designing Jointed Concrete Pavements for Parking Lots & Industrial Facilities Amanda Hult, PE National Ready Mixed Concrete Association
4:55 PM - 5:20 PM	Pervious Concrete - Mix Designs, Installation, Maintenance & Cleaning - 2018 Alan Sparkman Tennessee Concrete Association

Professional Development (Tuesday 9/18)

Track 2: Engineering Management | Location: Quarter Horse/Palomino

7:30 AM - 8:30 AM	Breakfast
8:30 AM - 9:20 AM	Trump's Tax Cuts and You Patrick Crowley Strategic Financial Partners
9:20 AM - 10:10 AM	Maximizing Ownership Opportunities in Today's World Patrick Crowley Strategic Financial Partners
10:10 AM - 10:40 AM	Break
10:40 AM - 11:30 AM	Build the Right Strategy, Brand Message, and Alignment for Success in the Age of Accelerations Bryan Gray Revenue Path Group
11:30 AM - 11:55 AM	It's the Law... a Panel Discussion on QBS Kasey Anderson, CAE (ACEC Tennessee/TSPE) Robert Campbell, PE (RGC&A) and Kathy Ware, PE (KS Ware & Associates)
12:00 PM - 1:30 PM	Lunch
1:40 PM - 2:30 PM	Communications 101: From the Basics to Creating Conversations that Count Donna Corlew C*Connect
2:30 PM - 3:00 PM	Break
3:00 PM - 3:50 PM	Futureforce - Developing Tomorrow's Engineers, Building Tomorrow's Engineering Firms Josh Hughes
3:50 PM - 4:40 PM	10 Tips for Surviving a Claim Dale Crow (Risk Strategies Group) and David Garst (Lewis Thomason)
4:40 PM - 5:05 PM	Engineering a Difference in the Global Community Luke Williams, PE SSR

Track 3: Transportation | Location: Franklin

7:30 AM - 8:30 AM	Breakfast
8:30 AM - 9:20 AM	eConstruction in Motion Ron Gant (InfoTech, Inc.) and Nick Taylor (SSR)
9:20 AM - 9:45 AM	I-40 at Donelson Pike Interchange Jon Storey, PE (Gresham, Smith and Partners) and Shaun Armstrong (TDOT)
9:45 AM - 10:10 AM	Slow Moving Vehicles Preston Elliott KCI Technologies, Inc.
10:10 AM - 10:40 AM	Break
10:40 AM - 11:30 AM	TTSUG & Work Zone Traffic Control Brad Freeze, PE TDOT
11:30 AM - 11:55 AM	Middle Tennessee Streetscape Project at MTSU Whitney Britt (TDOT) and Jim Kerr (City of Murfreesboro)
12:00 PM - 1:30 PM	Lunch
1:40 PM - 2:30 PM	I-65/I-40 Emergency Bridge Repair Will Reid, PE and Ted Kniazewycz, PE TDOT
2:30 PM - 3:00 PM	Break

Professional Development (Tuesday 9/18)

Track 3: Transportation | Location: Franklin

3:00 PM - 3:50 PM	FHWA Pam Kordenbrock Federal Highway Administration
3:50 PM - 4:40 PM	TBD
4:40 PM - 5:05 PM	Geophysical Study of Natural Bridge Ted Dean Draper Aden Associates

Track 4: Electrical, Mechanical & Industrial | Location: Morgan

7:30 AM - 8:30 AM	Breakfast
8:30 AM - 9:20 AM	From Design to Operations: Geothermal, The Olive Branch Story Mike Burton, PE SSR
9:20 AM - 10:10 AM	Recent Developments in Wind Tunnel Capabilities at AEDC Michael Mills Quantitech, Inc.
10:10 AM - 10:40 AM	Break
10:40 AM - 11:30 AM	Cyber-Terrorism Defense Steven Dyer Central Service Association
11:30 AM - 11:55 AM	Prevention Through Design Josh Hughes Hughes Engineering, LLC
12:00 PM - 1:30 PM	Lunch
1:40 PM - 2:30 PM	Why Cybersecurity for Control Systems Larry Grate, PE PREMIER System Integrators
2:30 PM - 3:00 PM	Break
3:00 PM - 5:05 PM	3D Laser Scanning: Mapping at the Speed of Light David Headrick KCI Technologies, Inc.

Track 5: Civil and Environmental | Location: Mustang

7:30 AM - 8:30 AM	Breakfast
8:30 AM - 9:20 AM	Oak Ridge and Hanford Water Treatment Plants Josh Corum Jacobs
9:20 AM - 9:45 AM	Revisiting Manhattan Project Water Infrastructure - Oak Ridge, TN and Hanford, WA Benjamin Simerl, PE Jacobs
9:45 AM - 10:10 AM	Sustainable Algae Based Wastewater Treatment & Decentralized On-site Wastewater Treatment Daniel Johnson OneWater
10:10 AM - 10:40 AM	Break
10:40 AM - 11:30 AM	Cumberland City Low Transmission Water Main: creating Redundancy to Enhance Dale Mosley Gresham, Smith and Partners
11:30 AM - 11:55 AM	Stray Current and Ductile Iron Pipelines
12:00 PM - 1:30 PM	Lunch
1:40 PM - 2:30 PM	HUD Resiliency Grant Panel

Professional Development (Tuesday 9/18)

Track 5: Civil and Environmental Location: Mustang	
2:30 PM - 3:00 PM	Break
3:00 PM - 3:50 PM	Guide to Sizing a Stormwater Quality Manufactured Treatment Device Mark Miller Aq-uashield
3:50 PM - 4:15 PM	Stormwater Control Measures Operation and Maintenance Tom Lawrence, PE TLE, PLLC
4:15 PM - 5:05 PM	High Performance Modular Biofiltration Systems: A "2nd Generation" Solution for Stormwater Management Scott Gorneau, PE Convergent Water Technologies

Track 6: Structural Location: Saddlebred	
7:30 AM - 8:30 AM	Breakfast
8:30 AM - 9:20 AM	Induced Earthquakes - Are Historic Buildings at Risk Jeanne Homer, AIA, and Carisa Ramming, PE Oklahoma State University
9:20 AM - 10:10 AM	Challenges in Concrete Construction Jacob Borgerson Wiss, Janney, Elstner Associates, Inc.
10:10 AM - 10:40 AM	Break
10:40 AM - 11:30 AM	Indiana State Fair Collapse Scott Nacheman, AIA DeSimone Consulting Engineers
11:30 AM - 11:55 AM	SEER Overview Scott Nacheman, AIA, and Jim Smithey, PE
12:00 PM - 1:30 PM	Lunch
1:40 PM - 2:30 PM	Engineering Jeddah Tower - The First Manmade Structure to Exceed 1 km in Height John Peronto, PE Thornton Tomasetti
2:30 PM - 3:00 PM	Break
3:00 PM - 3:50 PM	Seismic Design of the Land Between the Lakes Approach Bridges Kyle McLemore, PE Palmer Engineering
3:50 PM - 4:40 PM	Design of Liquid Retaining Structures with ACE 530 Brian Hollander, PE SSR
4:40 PM—5:05 PM	Transfer Girders Mike Sheridan, PE Allen & Hoshall, Inc.

Track 7: Geotechnical Location: Highland	
7:30 AM - 8:30 AM	Breakfast
8:30 AM - 9:20 AM	Memphis I-240 Bridge, Ashraf Elsayed, PE Geotechnology, Inc.
9:20 AM - 9:45 AM	Rigid Inclusions at Top Golf - Nashville, TN Wayne Gibbs (PSI) & Matt Hammett (Hayward Baker, Inc.)
10:10 AM - 10:40 AM	Break
10:40 AM - 11:30 AM	Geopier Ground Improvement Discussion, Matthew Caskey Geopier Foundation Company

Professional Development (Tuesday 9/18)

Track 7: Geotechnical Continued Location: Highland	
11:30 AM - 11:55 AM	Geophysical Tools - Expanding Exploration Options John Agee, PE Terracon Consultants, Inc.
12:00 PM - 1:30 PM	Lunch
1:40 PM - 2:30 PM	Geotechnical Challenges at Boone Dam - Washington County, TN, Scottie Barrentine Tennessee Valley Authority
2:30 PM - 3:00 PM	Break
3:00 PM - 3:50 PM	Micropiles and Drilled Shafts - Dury Inn and Suites - Knoxville, TN, Nick Bachand Rembco Geotechnical Contractors, Inc.
3:50 PM - 4:40 PM	Instrumentation and Construction of Micro-Tunnel in Nashville for Metro Water Services Kal Vencill EGSci Consulting, Inc.
4:40 PM - 5:05 PM	Mountain Creek Bank Restoration Jeff Hoilman, PE Propex GeoSolutions