

## UCT 2022 Primary Education Program

<b>Tues. Jan. 25</b>	<b>Room 202B Track I-A: Sewer Construction/Rehab</b>	<b>Room 202A Track I-B: NASSCO Sewer Operations</b>	<b>Room 202C Track II Waterworks</b>	<b>Room 202D Track III Microtunneling/Tunneling</b>	<b>Room 203A Track IV-A HDD</b>	<b>Room 203B Track IV-B HDD</b>	<b>Room 204A Track V-A Damage Prevention &amp; Safety</b>	<b>Room 203C Track VI Power &amp; Gas Utility</b>
8:30-8:55	Pipeline Inline Inspection: Basic Principles	Remaining Useful Life: Gravity Pipe Assets		Pilot Tube Method of Guided Boring in Memphis	Unique Design Re-Routes Critical Force Main while Minimizing Community Impact	Nozzle Selection for Optimum Tooling Performance & Life	From Best Practices to Next Practices: Addressing Inefficiencies in 811	Virtual Reality Prepares Field Workers to Monitor, Protect Gas Assets
9:00-9:25	Force Main Assessment & Rehabilitation		Open Cut, Tunneling, Ground Condition in Construction Risk Assessment of Houston 108" Waterline	Why Tunnel When you can Open Cut? Debunking the Myth Tunneling is Always More Expensive	HDD Pipeside Efficiencies and Innovations	City of Frisco's HDD with 20" Fusible PVC Pipe to Mitigate Construction Impact	Safe Use of High-Pressure Jetting Equipment in Surcharged Wastewater Collection Systems	
9:30-9:55	Multiple Trenchless Methods Offer Cost, Time Savings for El Paso Water		Going Far with CMAR: Diving into Raw Water Pipeline Design, Construction for NTMWD	Houston's 72" Water Line from Emancipation Ave. to Tuam St.	Gyro Navigation (DrillGuide) and Intersects	Benefits of Using Clean Drilling Fluid	Growing Importance of As-Builts	Acoustic Methods to Detect Infrastructure Cross Bores
10:00-10:25	Siphon with Bends Restored with UV Technology	Lateral Ownership: Pros & Cons	Overcoming Adversity on Critical Water Main CIPP to Achieve Project Success	Tunnel Condition Assessment: State of the Practice	Lake Erie Outfall Project	Rock Bore Using Segmented PVC Pipe	Subsurface Investigation Methodology: New Industrial Standard	New Solutions for Isolating Gas Distribution Pipelines
10:30-10:55	The Engineer is the Gatekeeper to Quality, Long-Term CIPP		Urban Construction of Large-Diameter Water Lines	Design-Build Technical Concept for 72" Microtunnel Pressure Pipe	Evolving HDD Technology to Simplify Job-Site Challenges	Fusion Gyro: Innovative Hybrid Advancement in Gyro-Steering Systems	Accounting for Underground Utility Vaults	Fiber Optic Leak, ROW Intrusion Detection: Challenges & Mitigations from Operator's Perspective
11:00-11:25	Advancements in Spray-Applied Lining: Current & Emerging Pipe Rehabilitation Technologies	Artificial Intelligence: NASSCO Guidelines	Pipeline Construction Inspection Guidelines	Replacement of Failed Corrugated Metal Pipe	Pipeline Owner/Operator Roundtable: Round 2	As-Built Mapping of Critical Pipeline Crossings		Review of States' Regulatory Damage Prevention Programs
11:30-11:55	Going Trenchless to Replace Sewer Line Under Fairgrounds, Water Park		Non-Disruptive, Close-Fit Pressure Pipe Rehab is Best-Fit Solution for Critical Tunnel Project	Latest on Direct Pipe, E-Power Pipe: Case Studies & Outlook		Optimizing Composite Technology to Provide Range of Pipe Repair Solutions	Reducing Consequences of Gas Pipeline Damage	

<b>Wed. Jan. 26</b>	<b>Room 202C Track I-C Sewer Construction &amp; Rehabilitation</b>	<b>Room 202A Track I-D</b>	<b>Room 202B Track I-E Sewer/Water</b>	<b>Room 202D Track VII Asset Management</b>	<b>Room 204A Track VIII: Women in Underground Utilities</b>	<b>Room 203A Track IX: Fiber Forecast/Operations</b>	<b>Room 203B Track IV-C HDD</b>	<b>Room 203C Track V-B Damage Prevention/ Safety</b>	<b>Room 204B Track X-A Emerging Technology</b>
8:30-8:55	Interceptor Design in Alluvial Floodplain	NASSCO's CIPP & Styrene Emissions Best Practices	Landmark Year for Sewer/Water Infrastructure	Good Asset Management Starts with Comprehensive Knowledge		KEYNOTE: Fiber Construction Forecast: FTTP, 5G	Panel Discussion: Gyro Steering Tool Technology	Pre-Engineered Shoring Systems for Cross-Trench Utility Challenges	Advantages of Onsite-Manufactured Pipe for HDD Installations
9:00-9:25	City of Hurst Replaces Critical Sewer Interceptor via Minimally Invasive Pipe Bursting		Condition Assessment Framework to Evaluate Spray-Applied Renewed Culverts	Computer Vision AI & Cloud Computing in Sewer Inspection: Driving Regulatory Compliance & Sound Asset Planning	Women in Engineering: Past, Present, Future	Micro-/Macro-Trenching Opportunities for Fiber Installation?		Hydro-Excavation Best Practices for Maximum ROI	Advancements in Sewer Bypass Technology with IoT (Internet of Things)
9:30 -9:55	CIPP Curing Monitoring System: Improving Installation Quality, Verifying Cure Completeness		Large-Diameter Storm Outfall Rehabilitation with Geopolymer Lining in Houston	Cleaning can be a Bitter Pill to Swallow; Smart Tech Cure Lowers Costs, SSOs	Developing, Comparing Prediction Models for Sanitary Sewer Condition Assessment using Multinomial Logistics	Women-Run Team Designs, Constructs 60" Tunnel under Houston Neighborhoods	HDD Contractors Roundtable	Geophysics: Important Tools in Subsurface Imaging	Acoustic-Based Pipeline Condition Assessment Offers Cost-Effective, Efficient Inspection
10:00-10:25	Diversify your Lateral & Mainline Rehabilitation Program	Hidden Capacity in Wastewater Interceptors? Non-Uniform Flow Modeling's Impact on Pipe Sizing	Inverted Siphon Design: How Low Should I Go?	Everything is Easier by the Foot: Unit Costing by Linear Foot	Women Lead Response to Challenges on Dallas Water Utilities 36" Interceptor		Safe use of Pneumatic Plugs	Advancements in Quality Control with Air-Vortex-Applied Coating Systems	
10:30-10:55	Inexpensive I&I Reduction Verification for Small System	Current State of Practice: DOT/ Municipal Storm Sewer Inspection, Evaluation Acceptance	Gyroscopic Mapping Technology Locates Utility in Congested Urban Area	Quantitative Risk Assessment of Large-Diameter Interceptors	Introduction to 'Leading Women of Damage Prevention'		Annular Pressure: How it's Changing the Industry	The Key to Damage Prevention Starts with SUE	Evolution of Excavation Shoring: Where we Were, What's Possible
11:00-11:25	UV Lateral Lining	Structural Testing of CMP with Polymeric Resin Chemistry	Pump Station Discharge Pipe Rehabilitation with FRP	Capturing Lost Revenue from Large Meters	How Industry Partners can Help Stop Human Trafficking		HDD Hall of Fame Forum	Testing, Evaluating Polymeric Spray-Applied Linings for Gravity, Pressure Applications	
11:30-11:55	Growth by the Numbers: Projected Sewershed Growth							Leverage Ease-of-Use Machine Technology to Maximize Underground Utility Construction	

<b>Thurs., Jan. 27</b>	<b>Room 101 Track I-F: Sewer/Water Construction &amp; Rehab</b>	<b>Room 104 Track X-B: Emerging Technology</b>	<b>Room 103AB Track XI: Engineering Ethics</b>
8:30-8:55	Advanced Condition Assessment on Gravity Sewers	Basalt Fiber Reinforcement Eradicates Corrosion Concerns in Concrete Pipes	Engineering Ethics
9-9:25	Equipment, Methods for Solving Hard Blockages & Common CIPP Installation Failures in 3" to 8" Pipes	Monoform+ and Monoform HEX	
9:30-10	Inspector Training for Cut-and-Cover Construction	Composites: The Future of Manhole Covers	