

Sunday: October 2, 2022 Reception Hosted by ? 5:30PM - 7:30PM

Monday: October 3, 2022

Time / Room Location	Company	Main Author	Paper Title
8am-11am Short Courses			
8-11am	Ariel Corporation - Retired	Greg Phillippi	SC04 - Basic Thermodynamics of Reciprocating Compression
8-11am	Solar Turbines	Dr. Rainer Kurz	SC01 - Centrifugal Compressors: Principles, Design and Control
8-11am	Wood - Vibration, Dynamics and Noise	Mr. Alasdair Robinson , P.Eng	SC05 - Introduction to Pulsation & Vibration on Reciprocating Compressors
8-11am	NFG, Southern Star, Willams, Cooper Machinery Services, Waukesha	Dr. Nasr Alkadi, Hans Mathews, Jacob Saletsky	SC13 - Discussions of Varying Hydrogen Blends on Integral, Low-Speed Natural Gas Engines.
8-11am			
11:00-11:30 Break			
11:30-1:00 pm Conference Kick-off Keynote from ?			
1:15-2:15pm Technical Papers			
1:15-2:15pm	Kinder Morgan	Mr. Angel Rivera	TP23 - Estimating Compressor Station Blowdown Time, Forces, and Temperatures: How Close Can You Get?
1:15-2:15pm	Zahroof Valves Inc., Energy Transfer Partners, Southwest Research Institute	Mr. Zahroof Mohamed	TP34 - PERFORMANCE MEASUREMENT OF LOW-SPEED PIPELINE TRANSMISSION COMPRESSORS WITH RADIAL MODULAR REED VALVES

1:15-2:15pm	Southwest Research Institute	Mr. Eugene "Buddy" Broerman , III	TP45 - A GMRC Technology: Improved Reciprocating Compressor Efficiency via Improved Pulsation Control
1:15-2:15pm	Williams, Ariel Corp., IDC Engineering	Mr. Ramiro Martin Leon	TP51 - Torsional Vibration Issues - What you don't know, may hurt you...!
1:15-2:15pm	Altronic LLC	Mr. Keith Brooks	TP42 - Optimizing Hydrogen Fueled Spark Ignited Engine Output & Emissions Through Advanced Ignition & Passive Prechamber Design
2:30-3:30pm Technical Papers			
2:30-3:30pm	Ariel Corporation	Ms Kaley R Coss	TP31 - Hydrogen Blending in Natural Gas Pipelines with Reciprocating Compressors
2:30-3:30pm	Southwest Research Institute	Mr. Brandon Lee Ridens	TP47 - GMRC Project: Improvements in Elemental Sulfur Test Methods for Natural Gas
2:30-3:30pm	Wood PLC	Mr. Chris Bibby	TP56 - Solving flow-induced pulsation problems in piping system, three case studies
2:30-3:30pm	HOERBIGER	Mr. Matthias Richtig	TP35 - Reciprocating compressor greenhouse gas emission footprint assessment and mitigation potential
2:30-3:30pm	Solar Turbines	Dr. Rainer Kurz	TP25 - Pipeline Simulations and Optimization for reducing carbon intensity
3:45-4:45pm Technical Papers			
3:45-4:45pm	ACI Services Inc. & Berkshire Hathaway Energy GT&S	Mr. W. Norm Shade	TP29 - Cumulative Lifetime Assembly-Induced Low Cycle Fatigue in Legacy Compressor Cylinders
3:45-4:45pm	Southwest Research Institute	Mr. Aaron Rimpel	TP46 - Dry Gas Seal Reliability: A Study of the Effects of Liquid Contamination on Seal Performance, Phase 4
3:45-4:45pm	Wood, Boardwalk Pipeline Partners	Mr. Wally Bratek , P.Eng.	TP53 - Compressor Station Modifications , Analysis Guidance and Lessons Learned

3:45-4:45pm	Sloan Lubrication System	CJ Sloan	TP37 - The High Cost of Over Lubrication: Quantifying the Negative Impacts of Excessive Power and Compressor Cylinder Lubrication on Natural Gas Pipeline Operations
3:45-4:45pm	Monico Monitoring	Mr. David Krenek	TP13 - You're Ready to Analyze Your Machine Data , But Is Your Data Ready?
Reception hosted by ? 5:30PM - 7:30PM			
Tuesday: October 4, 2022			
Breakfast Reception by ?, 6:00 AM - 8:00 AM			
Time / Room Location	Company	Main Author	Paper Title
8am-11am Short Courses			
8-11am	Southwest Research Institute, Solar Turbines Incorporated, Kinder Morgan Natural Gas	Mr. Hector Alejandro	SC02 - Field Performance and Instrumentation of Centrifugal Compressors
8-11am	Southwest Research Institute	Mr. Nathan Poerner	SC10 - Have Sensors, Will Travel
Mini SC 8-9:30am	Kinder Morgan	MaryBeth McBain	Operator Perspectives on Hydrogen Blending
Mini SC 8-9:30am	Hoerbiger Service	Mr. John Ladd	Impact of Increased Hydrogen on Natural Gas Reciprocating Compressors
Mini SC 9:30-11am	Wood Vibration, dynamics, and noise	Mr. Zachary Dobberthien , EIT	Shake, rattle and grow 2 , pipe support classification for vibratory and thermal growth applications (updated and improved)
Mini SC 9:30-11am	Siemens Energy and TC Energy	Mr. Kevin Davies	The Perfect Storm.... Who moved our Knowledge
8-11am			
11:00 am - 1:00 pm Lunch with Exhibitors			

1:00 pm - 2:15 pm Tech Updates (8 Tech Updates)			
8 min	Reciprocating Engines	TU16 - INNIO Waukesha	INNIO Waukesha Gas Engines New Unit Technology Update
8 min	Reciprocating Compressors	TU09 - Ariel Corporation	Ariel KBC, KBD, and KBF Product Release
8 min	Research	TU30 - National Institute of Standards and Technology	High Pressure Vapor Liquid Equilibrium Measurements of binary hydrocarbon and water mixtures using Nuclear Magnetic Resonance (NMR) Spectroscopy
8 min	Other	TU08 - Windrock, Inc.	Tech Update: Windrock's Expanding Product Portfolio
8 min	Emissions	TU22 - Solar Turbines	Gas Turbine Emissions and Regulatory Update
8 min	Reciprocating Compressors	TU29 - STASSKOL GmbH	CNGS / Piston Rod Packing Solutions for Reduced Emissions
8 min	Centrifugal Compressors	TU01 - Elliott Group	Elliott Technology for Pipeline Industry
8 min	Emissions	TU05 - Caterpillar Inc.	Caterpillar Low Carbon Solutions for Gas Compression Applications
8 min	Data Analytics	TU02 - Monico Monitoring Inc	Update of Monico Products and Services
2:30 pm - 3:30 pm Technical Papers			
2:30-3:30pm	Southwest Research Institute, Hanwha Power Systems America, PwrCor, Williams	Dr. Timothy Allison	TP01 - Comparative Performance Analysis of Waste Heat Recovery Systems for Multiple Compressor Station Heat Sources
2:30-3:30pm	Wood	Mr. Mike Cyca , PEng	TP06 - Centrifugal Dynamic Surge Design - Balance of Competing Philosophies
2:30-3:30pm	Windrock, Inc.	Mrs. Mary Margaret C	TP11 - Learning more about reciprocating machinery health through increased data collection frequency

2:30-3:30pm	Solar Turbines Inc. and Montrose Air Quality Services	Ivan Carlos	TP16 - Formaldehyde of Emissions Measurements from Dry Low Emissions Industrial Gas Turbines
2:30-3:30pm	Southern California Gas	Mr. Joseandres Sanchez	TP26 - California Regulatory Implications for Reciprocating Compressor Rod Packing
3:45 pm - 4:45 pm Technical Papers			
3:45-4:45pm	Southwest Research Institute	Carolyn Day	TP02 - Development of an Ultrasonic Sensor to Detect Liquid in Gas Process Piping and Equipment
3:45-4:45pm	Solar turbines/Caterpillar	Mr. Michael Clay	TP08 - Emissions Reductions and Efficiency Gains while Increasing Capacity on Legacy Turbomachinery Equipment
3:45-4:45pm	Southwest Research Institute	Dr. Jordan Nielson	TP33 - Measuring Lube Oil Thickness of Reciprocating Compressors
3:45-4:45pm	Baker Hughes	Mr. Sergio Cipriani	TP18 - Hydrocarbons Emission Recovery in Turbo-Compressor Units
3:45-4:45pm	ACI Services Inc.	Mr. W. Norm Shade	TP28 - Compressor Pulsation Control & Capacity Maintenance With Variable (0 to >20%) Hydrogen Content
4:45 pm - 6:00 pm Exhibitor Hall Reception			
Wednesday: October 5, 2022			
Time / Room Location	Company	Paper Title	
8:00 am - 9:00 am Technical Papers			
8-9 am	Shell Oil Products	Dr. Cesar Lizcano	TP22 - Considerations for the use of high performance PAG based gas compressor oils

8-9 am	Southwest Research Institute, GE Global Research	Mr. Joshua Dean Neve	TP09 - The Effects of CO2 Impurities on Compressor Performance for Carbon Capture Systems
8-9 am	Kinder Morgan	Mr. Angel Rivera	TP61 - Will It Shake: Real-World Comparison of Pipe Support Effectiveness on Vibration
8-9 am	Colorado State University	Brenna King	TP21 - Test Method Evaluation and VOC Exhaust Species for Natural Gas-Fired Reciprocating Engines
8-9 am	TC Energy	Mr. Seth Johnson	TP39 - Comparison of Control and Alarm Strategies of Auto-balance and Fuel Injection Systems for Reciprocating Engines.
9:15 am - 10:15 am Technical Papers			
9:15-10:15am	ACI Services, Inc.; AXIP Energy Services; Cooper Machinery Services	Mr. Dwayne Allen Hick	TP32 - Identifying Flow Modeling Issues of a 3-stage, Gas Lift, 1800 rpm VFD, Reciprocating Compressor Package
9:15-10:15am	Radical Combustion Technologies	Mr. Michael J Manfred	TP43 - The Next Generation of NOx Retrofit Technologies for Pipeline Compressor Engines
9:15-10:15am	Wood	Mr. Wally Bratek , P.Eng	TP58 - Station-Wide Vibration/Pulsation Analysis , Best Practices for Data Collection and Post-Processing
9:15-10:15am	Hoerbiger Corporation of America	Mr. Patrick Taylor	TP62 - Case Study on Finger Unloader Pulldown Failures
9:15-10:15am	Southwest Research Institute	Mr. Eugene "Buddy" B	TP44 - A GMRC Research Project: Hydrogen Blending in Natural Gas Compression Facilities
10:30 am - 11:45 pm Tech Updates (8 Tech Updates)			

8 min	Reciprocating Engines	TU15 - Cooper Machinery	Cooper Machinery Services update
8 min	Reciprocating Compressors	TU11 - Siemens Energy	Case Study: Application of Automated Clearance Pocket Unloader in Boil-off Gas Service
8 min	Research	TU19 - Southwest Research Institute	R&D Facilities Supporting Gas Machinery Decarbonization
8 min	Other	TU24 - Baker Hughes	Gas turbine engine development for high hydrogen blends with wide fuel-flex combustion system
8 min	Emissions	TU23 - Radical Combustion	Methane Reduction from Pump-Scavenged Pipeline Compressor Engines
8 min	Reciprocating Compressors	TU13 - Zahroof Valves	Zahroof Valves Inc. - Tech Update - New modular reed valve technology to improve performance of slow-speed reciprocating compressors in pipeline transmission applications.
8 min	Vibration/Pulsation	TU20 - Wood	One clamp to rule them all , part V
8 min	Emissions	TU06 - Kodiak Gas Services	EcoView and gas compression, evolution to provide responsibly sourced natural gas and its steps to address the ever evolving regulatory environment
8 min	Emissions	TU04 - Altronic	Altronic AFR-500 Air Fuel Ratio Control
11:45 am - 1:00 pm Exhibit Hall Lunch			
1:15 pm - 4:15 pm Short Courses			

1:15-4:15pm	IES	Jim McCarthy	SC12 - Air Regulatory Update
1:15-4:15pm	Southwest Research Institute	Mr. Benjamin A. White	SC09 - Advanced Topics in Acoustics and Vibrations
Mini SC 1:15-2:45pm	Southwest Research Institute	Mr. Adrian Alvarado	Compressor Station Transient Modeling
Mini SC 1:15-2:45pm	ACI Services, Inc.	Mr. Dwayne Allen Hickman	Reciprocating Compressor Performance -- Know What You Are Really Buying
Mini SC 2:45-4:15pm	Southwest Research Institute	Mr. Benjamin A. White	Analyses Not Addressed by API Standards: AIV/FIT/FIV/Small Bore Piping
Mini SC 2:45-4:15pm	Sloan Lubrication Systems	Bryan Boarts	Divider Block Lubrication Systems for Reciprocating Gas Compressors: Design, Operation, Maintenance & Troubleshooting
GMRC Annual Membership Meeting - XXXXX (Omni) 4:15 PM - 5:00 PM			
XXXXX (Omni) Hotel Closing Reception 5:30 PM - 6:30 PM			