



**GAS MACHINERY CONFERENCE: OCTOBER 3-6, 2021 LIVE / IN-PERSON IN LOUISVILLE, KENTUCKY**

<b>Monday: October 4, 2021</b>			
<b>Time / Room Location</b>	<b>Company</b>	<b>Main Author</b>	<b>Paper Title</b>
<b>8am-11am Short Courses</b>			
8-11am	Ariel	Greg Phillippi	Basic Thermodynamics of Reciprocating Compression
8-11am	Solar Turbines	Dr. Rainer Kurz	Industrial Gas Turbines and Electric Motor Drives for Centrifugal Compressors
8-11am	Wood VDN	Alasdair Robinson	Introduction to pulsation and vibration on reciprocating compressors
8-11am	Southwest Research Institute, SwRI	Justin Hollingsworth	An Overview of Machinery Rotordynamics
8-11am	Cooper Machinery Services	Hans Mathews	Data Collection and Analysis Techniques for Emissions Mapping
<b>11:00-11:30 Break</b>			
<b>11:30-1:00 pm Conference Kick-off Luncheon</b>			
<b>1:15-2:15pm Technical Papers</b>			
1:15-2:15pm	Southwest Research Institute	Sarah Simons	Pulsation and Mechanical Design for Compressors in Hydrogen Mixture Applications
1:15-2:15pm	Siemens	Gautam Chhibber	Strategies for Reducing Fugitive Emissions and Future-proofing Legacy Centrifugal Compressors
1:15-2:15pm	Engineering Dynamics Inc.	Troy Feese	Special Considerations for Motors Driving Reciprocating Compressors
1:15-2:15pm	CSU	Rodrigo Antonio Bauza	Improved catalyst regeneration process to increase poison removal and improve performance recovery
1:15-2:15pm	Wood VDN	Mehdi Arjmand	GMRC research update – fiberoptic strain pulsation measurements
<b>2:30-3:30pm Technical Papers</b>			
2:30-3:30pm	Radical Combustion Technologies	Michael Manfredi	Implementation and Field Testing of Enhanced Radical Ignition (ERI) in a GMVC6 open chamber natural-gas engine

2:30-3:30pm	Southwest Research Institute	Aaron Rimpel	Dry Gas Seal Reliability: A Study of the Effects of Liquid Contamination on Seal Performance, Phase 3A
2:30-3:30pm			
2:30-3:30pm	Williams	Michael Lynch	TCVC-20: Zero Hour Overhaul
2:30-3:30pm	Wood VDN	Kelly Eberle	Determining allowable criteria for pulsation bottles
<b>3:45-4:45pm Technical Papers</b>			
3:45-4:45pm	Southwest Research Institute	Dr. Tim Allison	Hydrogen Compressor Requirements and Technology for Blended Pipelines
3:45-4:45pm	TC Energy	Hemanth Satish	Mechanical Piping Design Guidelines for Non-Recip Piping Systems
3:45-4:45pm	Zahroof Valves Inc. / Southwest Research Institute	Zahroof Mohamed	Radial StraightFlo valves for pipeline applications - field measurements vs simulation results.
3:45-4:45pm	ACI Services	Dwayne Hickman	Solving an Edge Computing Challenge
3:45-4:45pm	Siemens Energy	Jesse Burgey	Update: HBA Turbocharger Retrofit Utilizing Scavenge Cylinders for Low Torque Operation Achieving Low NOx and Reducing Fugitive GHG Emissions Efforts
<b>Reception hosted by Ariel</b>			
<b>Reception 8-10pm</b>			
<b>Tuesday: October 5, 2021</b>			
<b>Breakfast Reception by Hoerbiger</b>			
<b>Time / Room Location</b>	<b>Company</b>	<b>Main Author</b>	<b>Paper Title</b>
<b>8am-11am Short Courses</b>			
<b>8-9:30 am</b>	<b>Panel Session</b>	<b>Moderator: Suzanne Ogle with GMRC</b>	<b>Strategic Visions for ESG for the Natural Gas Industry</b>
8-11am	Hoerbiger Corporation of America	Randy Dalmolin	Basics of Compressor Valve Design and Troubleshooting
8-11am	Elliott Turbo, Solar Turbines	Dr. Klaus Brun	Turbomachinery for Refinery Applications
8-11am	Southwest Research Institute	Eugene L. Broerman	Advanced Topics in Acoustics and Vibrations
Mini SC 8-9:30am	Hoerbiger	John Ladd	Fundamental Compressor Forces
Mini SC 9:30-11am	Wood VDN	Jaehee Chae	Design and Stress Analysis of the Piping System for Rotating Machinery

Mini SC 9:30-11am	ACI Services, Inc.	Dwayne Hickman	Reciprocating Compressor Performance: Seeing the Big Picture
<b>11am-1pm Lunch with Exhibitors</b>			
<b>12:45pm-2:30 pm Tech Updates (12 tech updates)</b>			
8 min	Solar Turbines	Dr. Rainer Kurz	Hydrogen Fuels
8 min	Wood VDN	Starr Dalton	One Clamp to Rule Them All
8 min	Southwest Research Institute	Dr. Tim Allison	Evaluating Blended Hydrogen Pipelines: Analysis and Test Capabilities
8 min	Elliott Turbo	Stephen Todd Omatick	Elliott Products for Midstream Applications
8 min	Cooper Superior	Hans Matthews	Cooper Superior update
8 min	Hoerbiger	David E. Bell	The Altronic NGI-5000 Advanced Ignition System for Large Gas Engines and Integral Compressors
8 min	Emit Technologies	Thomas Peterson	EMIT Technologies Controls Update
8 min	Zahroof Valves Inc.	Zahroof Mohamed	Zahroof Valves Inc., Technology Update 2020-2021
8 min	ACI Services, Inc.	Dwayne Hickman	Tech Update for ACI's eRCM Products and Solutions
8 min	INNIO Waukesha Gas Engines	Nick Klosinski	INNIO Waukesha Gas Engines Service Technology Update
8 min	Siemens Energy	Austin Neumeier	iFLOW g3 Release and Remote Diagnostic Services
8 min	Champion X/Windrock	Javvad Qasimi	Control of Compressor Fouling and Corrosion with a Single Product - Windrock
<b>2:30-3:30pm Technical Papers</b>			
2:30-3:30pm	Southwest Research Institute	Dr. Tim Allison	Development and Test Progress Towards a Supercritical Carbon Dioxide-Based Gas Turbine Waste Heat Recovery System
2:30-3:30pm	Solar Turbines	Dr. Rainer Kurz	Control Concepts for Centrifugal Compressors
2:30-3:30pm	INNIO's Waukesha gas engines/ Peco filters	Ryan Krafcheck	Addressing Fuel Filtration and Emission Challenges in Hot Fuel Gas Compression Applications
2:30-3:30pm			
2:30-3:30pm	Wood VDN	Mathieu Barabe	Shake, rattle and grow, part II - pipe support classification for vibratory and thermal growth applications (updated and expanded)
<b>3:45-4:45pm Technical Papers</b>			

3:45-4:45pm	Elliott Group	Derrick Bauer	Materials for Hydrogen Compression and Transportation
3:45-4:45pm	Enbridge	Chuks Amobi	Half a Mile Spacing from Compressor Station to Meter Station is Far Enough, right?
3:45-4:45pm	TECO-Westinghouse Motor Company	Enrique Ledezma	SiC Based MVD Power Technology for Heat Recovery Applications
3:45-4:45pm			
3:45-4:45pm	Champion X/Windrock	Mark Hullinger	Benefits of Automated Engine Balancing on Slow Speed Reciprocating Engines – Williams & Windrock

#### 4:45-6 pm Exhibitor Hall Reception

**Wednesday: October 6, 2021**

Time / Room Location	Company		Paper Title
<b>8-9 am Technical Papers</b>			
<b>8-10:15 am Panel</b>	<b>Data Analytics Panel Session</b>	<b>Monico, Innio, Cooper, TBD</b>	<b>How Data Analytics Can Transition the Industry</b>
8-9 am	Southwest Research Institute	Eugene Broerman	Development of a Hermetically Sealed Linear Motor Reciprocating Compressor (LMRC) for Hydrogen Transport Applications
8-9 am	HOERBIGER Wien GmbH	Bernhard Fritz	Getting reciprocating compressor cylinder lubrication just right
8-9 am	Wood VDN	Kelly Eberle	Discharge temperature calculation - that's a hot topic
8-9 am	Champion X / Windrock	Caleb Clark	Compressor Vibration Control via Chemical Application – DCP & Windrock
<b>9:15-10:15 am Technical Papers</b>			
<b>8-10:15 am Panel</b>	<b>Data Analytics Panel Session</b>	<b>Monico, Innio, Cooper, TBD</b>	<b>How Data Analytics Can Transition the Industry</b>
9:15-10:15am	Williams / Siemens	Scott Allen Tacket	Electrifying a Legacy Compressor Station as a Means to Lower Emissions and Reduce OpEx
9:15-10:15am	TC Energy / Sloan Lubrication Systems	C.J. Sloan	Gas quality improvements achieved through a 90% reduction in compressor cylinder lubrication rates.
9:15-10:15am	Wood VDN	Mathieu Barabe	Damped head-end outboard supports
9:15-10:15am	Southwest Research Institute, SwRI	Carolyn Day	Development of a Robust Scrubber Level Controller – Part 3

#### 10:30-12:15 pm Tech Updates (12 tech updates)

8 min	Shell Lubricants	Mark Albert	Converting to Polyalkylene Glycol Lubricants in Modern Gas Turbines
8 min	Cooper Machinery Services	Patrick Gillespie	Cooper Machinery Services update
8 min	INNIO's Waukesha gas engines	Ryan Krafcheck	Waukesha engine Tech Update
8 min	Caterpillar	Speaker TBD	Caterpillar Technolgy Updates
8 min	AAA Tech	Reid McNally	New Clamp Technologies
8 min	SwRI	Buddy Broerman	SwRI and ACI - Virtual Orifice standardization
8 min	Champion X/Windrock	Javvad Qasimi	Compressor Analytics as a Service – DCP & Windrock
8 min	DOW	Jillian Charon	Solvent Mitigation of Salt Fouling in Natural Gas Dehydrators
8 min	Hoerbiger Corporation of America	Anthony Destefano	Technology Update - Electric Variable Volume Control Pocket
8 min	Siemens Energy	Devon Babcock	O-ring Conversion of Gasketed Reciprocating Compressor Cylinders to Meet CARB Emissions Standards
8 min	Monico Monitoring	Doyle Taylor	New Features of mCore & MonicoLive
8 min	Wood VDN	Alasdair Robinson	Torsional vibration monitoring (TVM) kit - case study

### 12-1:15pm Exhibit Hall Lunch

### 1:15-4:15pm Short Courses

1:15-4:15pm	Jim McCarthy	Jim McCarthy	Air regulatory update
1:15-4:15pm	Southwest Research Institute	Nathan Poerner	Have Sensors, Will Travel
1:15-4:15pm	Wood VDN	Michal Gaca	Field techniques for torsional vibration measurements with case studies
1:15-4:15pm	Wood VDN	Jaehee Chae	Foundation design practices for rotating machinery
Mini SC 1:15-2:45pm	Southwest Research Institute	Sarah Simons	Analyses Not Addressed by API Standards: AIV/FIT/FIV/Small Bore Piping
Mini SC 2:45-4:15pm	Mueller Environmental Designs, Inc.	Lawrence Patrick Seler	ASME Code Overview / 2021 Changes and Notch Toughness Case Study