



Welcome to FLOW Users **Group Meeting 2022!**



Agenda

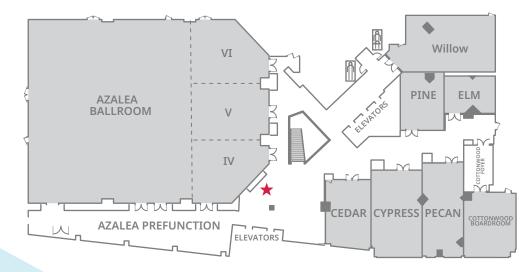
	Wednesday, Oct. 19	
	4:00 PM Registration Desk Opens ★	Azalea Pre-function
	6:00 PM Reception Begins	Azalea Pre-function
	7:00 PM Customer Appreciation Dinner	Azalea Ballroom

	Azarea Bani Gorii	7.50 TW Customer Appreciation Binner
7		Thursday, Oct. 20
	Azalea Ballroom	7:00 AM Breakfast Buffet
	Azalea Ballroom AcConnell	8:00 AM Welcome to FLOW 2022 · General Session · The Energy Transition: What is it and What Does it Mean for Your Business? with Charles N
	Azalea Pre-function	9:30 AM Break: Coffee Social and Product Expo
		10:00 AM Breakout Session I*
	Azalea Ballroom	11:30 AM Lunch with the Experts
		1:00 PM Breakout Session II*
Brea	Azalea Ballroom	2:30 PM Networking and Product Expo
Ses		3:30 PM Breakout Session III*
10.00		4:30 PM Breakout Session VI*
Brea	024 Lounge - Westin 1st floor	5:30 PM Networking Social
Sess 1:00 - 2	024 Lounge/Lobby - Westin 1st floor	6:30 PM Dinner Shuttle Service Boarding
	Houston, TX	7:00 PM Dinner – A Night on the Town
Brea Sessi		Friday, Oct. 21
3:30 - 4	Azalea Ballroom	8:00 AM Breakfast Buffet
Rre		

9:00 AM Advanced Product Exploration and Discussions

11:00 AM To-Go Luch Box Pickup

Azalea Pre-function



	Thursday, Oct. 20									
	Azalea IV-V	Azalea VI	Pine	Willow	Cypress	Pecan	Cedar			
Breakout Session I 10:00 - 11:30 AM	Opera Manageme		Gas Management Solutions	PipelineScheduler	Synthesis	GeoFields				
	LUNCH WITH THE	EXPERTS 11:30 -	1:00 PM AZALEA	BALLROOM						
Breakout Session II 1:00 - 2:30 PM	PipelineManager	PipelineStudio	Gas Management Solutions	Scheduling Pipelines & Terminals	Synthesis	GeoFields				
Breakout Session III 3:30 - 4:30 PM	PipelineManager	PipelineStudio	Gas Management Solutions	Scheduling InventoryScheduler	Synthesis	GeoFields	PipelineOptimizer			
Breakout Session IV 4:30 - 5:30 PM	PipelineManager	PipelineStudio	Gas Management Solutions	PipelineScheduler	Synthesis	GeoFields				
	Friday, Oct. 21									
	Azalea IV-V	Azalea VI	Pine	Willow	Cypress	Pecan	Cedar			
Deep Dive Sessions 9:00 - 11:00 AM	PipelineManager	PipelineStudio	Gas Management Solutions	Scheduling InventoryScheduler	Synthesis					

Wednesday, October 19th FLOW 2022 Begins!

Sign-in Opens 4:00 PM - 6:00 PM

Networking Reception 6:00 PM - 7:00 PM

Customer Appreciation Dinner

Thursday, October 20th

Roadmap Updates, Case Studies & Demos

Welcome to FLOW 2022 & Technology **Showcase**

8:00 AM - 9:30 AM

We're back in person in Houston, TX! Join us for our opening presentation and portfolio update.

Pedro D'Ascola, VP & GM, Energy and Transportation Solutions, Emerson

Aaron Boettcher, VP, Sales & Marketing, Emerson

Marcus Patrinicola, Sr. Director, Global Software Sales, Energy and Transportation Solutions, Emerson

Julie Hatfield, Sr. Director, Product Management and Marketing, Energy and Transportation Solutions, Emerson



Guest Speaker Presentation

The Energy Transition: What Is It and What Does It Mean To Your Business?

Charles McConnell Executive Director, Center for Carbon Management and Energy Sustainability

An overview of a dynamics of a new and evolving sustainable energy industry. The session will include an introduction to various perspectives of what the new energy industry is, its drivers and how companies and economies will respond to this changing industry. This will be an interactive session, facilitated by an industry veteran designed to engage participants and educate on this evolving energy transition.

Breakout Session I

Thursday 10:00 - 11:30 AM

Operational Management Solutions | Azalea Ballroom

Operational Management Solutions Update

A combined session highlighting new features, products, and technology, including support for cybersecurity and decarbonization of the energy supply chain.

Paul Dickerson, Phani Kanakamedala, Emerson

Performing Leak Tests within RuptureSentinel

RuptureSentinel is a real-time statistical pattern recognition tool that uses advanced pattern recognition algorithms and Bayesian inference specifically designed to detect ruptures in a timely manner. Using machine learning algorithms. RuptureSentinel analyzes real-time SCADA data for patterns from consistent training data to make predictions and produce indications of a leak due to sudden changes in hydraulic parameters such as pressure and flow. This presentation presents the results of leak tests on a RuptureSentinel configuration for a pipeline. The results show that RuptureSentinel can be used as a layer of leak detection systems to monitor the sudden loss of a large volume of product in a pipeline system.

Operational Management Soltions Team, Emerson

Gas Management Solutions | Pine Ballroom

Gas Management Solutions Product Updates

During this session, we will provide updates on our roadmap, new product features, and what is next, including some remarks to support commercial business for Green Gas (including hydrogen).

Martha Rendon, Emerson

Exploring Gas Management Solutions' Technology

This presentation includes new technical product enhancements and cybersecurity related features that have been implemented.

Muru Arumugam, Emerson

PipelineScheduler | Willow Ballroom

Holly Energy Customer Presentation: Gantt Chart

Enhanced integration, task automation & efficient publishing of customer specific pumping orders.

Chase Riggs, Joel Stanley, Rafael Ruiz, Holly Energy

Valero Customer Presentation:

Improved alerts and creating/publishing integrated pumping orders and inventory reports.

Jason McInturff, Chris Peterson, Julie Costilla, Bobbi Ruiz, Joe Drewnowski, Valero

USM Batch Plan as Delivered

Learn about USM (Unified Step Model) Batch Planning and New Batch Optimization Capabilities in PipelineScheduler.

John Hertel, Emerson

Synthesis | Cypress Ballroom

Synthesis Roadmap and Vision

This session includes new key product features, technological advancements of the software and our long-term vision for it.

Rohan Awasthi. Emerson

Adding New Assets to the Existing Application Instance

Managing new assets can be complex. Learn how James imported and managed the new and existing assets in his order-to-cash operations in Synthesis with minimal assistance.

James Grotte, Chevron Pipeline

GeoFields | Pecan Ballroom

GeoFields Update

Overview of product roadmap for 2023 and beyond, preview of new products, overview ArcGIS Pipeline Referencing (APR) Starter Kit.

Michael Ray, Emerson

Lunch with the Experts 11:30 AM - 1:00 PM | Azalea Ballroom

Lunch + Cybersecurity



The Cybersecurity Reality Spectrum, Pipeline **Security Directives and Emerson's Approach to Enablement**

Michael Lester Director, Cybersecurity Strategy,

Governance & Architecture, Emerson

Expectations and requirements for Operators to achieve and maintain higher level cybersecurity capabilities and postures in operations are significant to protect critical infrastructure related global services and supply chains. The journey to meeting new regulatory requirements like the recent Pipeline Security Directive and working to close gaps toward zero-trust architecture objectives can be daunting. While striving to meet cybersecurity objectives, learning how to navigate and think about the 'cybersecurity reality spectrum' in operational environments against established norms is a must. This session will introduce a perspective (cybersecurity reality spectrum) and provide a view across this spectrum from design and operations to service and transformation with the application of general expectations and the reality we operate in.

Breakout Session II

Thursday 1:00 - 2:30 PM

PipelineManager | Azalea IV-V Ballroom

Pipeline Leak Detection

Alyeska and Emerson will discuss alarm attribution using PipelineManager. This session focuses on various alarms and how they can be attributed using tools and data available in VisualPipeline.

Yoshi Okamato II, Alyeska Pipeline **Greg Morrow** PhD., Emerson

PipelineStudio | Azalea VI Ballroom

PipelineStudio Product Update and Discussion

Join us for a review of new and updated features in PipelineStudio. We will also discuss fluid properties and the changing energy landscape.

Paul Dickerson, Jon Barley PhD., Emerson

Scheduling Product Suite | Willow Ballroom

Roadmaps for PipelineScheduler, TerminalScheduler & **InventoryScheduler**

We will present and discuss the roadmaps for each of the primary scheduling products.

Dieter Sticht, Matt Stangl, Tyler Capell, Emerson

Synthesis | Cypress Ballroom

Synthesis Cybersecurity Update and Data Analytics

To make Synthesis more secure, we have implemented several security features that will be discussed in this session. We will also be requesting feedback to hear your firsthand experiences related to cybersecurity.

Randy Lisle, Bipin Pratihar, Emerson

Gas Management Solutions | Pine Ballroom

Gas Management Solution Implemented and Fully Integrated – Customer Presentation

Learn how two transmission companies successfully implemented our gas commercial solution to support their complete business cycle.

Maximiliano Nunez, Gilberto Garcia, SEMPRA Dr. Kenneth Chikezie Nwagu, Ph.D., Ing. Benoni Ayeh, WAPCo

GeoFields | Pecan Ballroom | User Case Study

Implementation of ArcGIS Pipeline Referencing on CenterPoint Energy's Gas Network

Join us for a case study on implementing ESRI's nextgeneration ArcGIS Pipeline Referencing (APR) system, built with the PODS 7 Data Model. From an ArcGIS Desktop PODS 5 environment to a web-based PODS 7 implementation with APR in ArcGIS Pro, listen to a review of business applications from CenterPoint Energy users and learn how ESRI's APR model can help your organization accurately model pipelines and effectively manage mission-critical assets.

Gary Worley, CenterPoint Energy Andrew Campbell, Emersor

Networking and Product Expo

Coffee Break and Expo

9:30 AM | Azalea Ballroom

Ice Cream Social and Expo

2:30 PM | Azalea Ballroom

We know it's not easy to see everything we have to offer at FLOW so we invite you to join us in the Azalea Ballroom for our Networking Social and Expo events! Meet with other industry professionals while discovering our latest products and get first-hand experience with our Developers, Product Managers and other subject matter experts. Take advantage of this unique opportunity to get the latest tips by participating in live demonstrations of our midstream application solutions.



Breakout Session III

Thursday 3:30 - 4:30 PM

PipelineManager | Azalea IV-V Ballroom

Key Performance Indicators for Leak Detection

Join us for this insightful case study on the key performance indicators for leak detection and pipeline operations and how to use data from PipelineManager to monitor performance.

Kaitlyn McCauley, Williams Pipeline Co.

PipelineStudio | Azalea VI Ballroom

Configuration Tuning Methodologies

Tuning offline configurations to match real world data requires operational knowledge. In this session, we will present some of the existing mechanisms for tuning configurations and discuss how this process could be improved in the future.

Brad Thompson, Shirin Askhan, Holly Energy

InventoryScheduler | Willow Ballroom

Presenting New InventoryScheduler

This exciting solution provides new capabilities for managing inventories inside terminals where terminal piping and asset lineups are not needed.

Tyler Capell, Product Manager, Emerson

Synthesis | Cypress Ballroom

Synthesis - The Energy Logistics Platform

As our customers transition to a broader mix of fuels and eventually move to cleaner forms of energy, Synthesis will be expanded. Learn what is on the horizon to make Synthesis the de facto Energy Logistics Platform

Bipin Pratihar, Rohan Awasthi, Emerson

Gas Management Solutions | Pine Ballroom

Commercial Gas Future for Transmission Companies

Join us to get a greater understanding of factors that are reshaping different Gas Markets.

Esther Solano, Emerson

PipelineOptimizer | Cedar Ballroom

Reducing Pipeline OPEX through DRA Optimization

This session will discuss the methodology used to minimize the total operating cost through adjusting DRA using PipelineOptimizer.

Howard Xiang, Enterprise Products

PipelineOptimizer Product Update

The PipelineOptimizer product roadmap will be presented, along with recent and upcoming features in the software.

Dr. Jennifer Worthen, Emerson

GeoFields | Pecan Ballroom

Hands-on Training - Lab I

Individual training and demonstrations:

- GeoFields Solutions
- ESRI ArcGIS Pipeline Referencing Software

John Minassian, Michael Ray, Kevin Hall, Andrew Campbell, Stuart Blumberg, Emerson

Breakout Session IV

Thursday 4:30 - 5:30 PM

PipelineManager | Azalea IV-V

Leak Detection for Less Instrumented Pipelines using Machine Learning

LeakSentinel is for pipelines where a hydraulic model is less suitable or inherently less accurate due to instrumentation being more sparse or less reliable. In this presentation, Dr Huntington will discuss the various Al & ML techniques incorporated into LeakSentinel and how optimal leak detection coverage is achieved.

Dr. Benjamin Huntington, Emerson

PipelineStudio | Azalea VI

Making an Informed Business Investment Decision in 15 Minutes Using PipelineStudio

Join this session to understand how PipelineStudio can be used to provide feasibility confirmation on large project investments.

Greg Lind, Enterprise Products

PipelineScheduler | Willow Ballroom

New Scheduling Capabilities in the Core Product

During this session, recent additions and advancements to the core PipelineScheduler solution will be presented.

Dieter Sticht, Emerson

User Access and Cybersecurity

Hear about the latest PFW security features: Communication Encryption, Penetration Testing, and Security Patch Management.

Tyler Capell, Emerson

GeoFields | Pecan Ballroom

Hands-on Training - Lab II

Individual training and demonstrations:

- GeoFields Solutions
- ESRI ArcGIS Pipeline Referencing Software

John Minassian, Michael Ray, Kevin Hall, Andrew Campbell, Stuart Blumberg, Emerson

Synthesis | Cypress Ballroom

Latest Terminal Features in Synthesis

As our terminal customer base increases and we have a bigger footprint in the market, learn about the new features and functionalities we are adding to deliver greater value to our existing and new customers

Christopher Early, Nice Thomas, Emerson

Beyond Oil & Gas – Terminal Management for Renewable and Chemical Product Assets

Emerson is known to be a key player in the oil & gas space, providing solutions from field instrumentation to commercial enterprise applications. Although renewable energy and chemical products create some unique challenges, they have many commonalities with typical oil & gas products when it comes to transportation and storage needs at the terminal site. We will explore how Emerson's Terminal Management System (TMS), TerminalManager, supports the common needs of liquid products, recent product investment to bridge the gaps for non-oil & gas products, and the roadmap to address future needs of this exciting and rapidly evolving space.

Ryan Thompson, Emerson

Gas Management Solutions | Pine Ballroom

Demo of New Modules and Features for GasLoadForecaster and GasTrading

Explore and discover GasLoadForecaster NextGen's recent additions. Learn how to apply machine learning in commercial gas solutions for forecasting load as well as calculating preliminary allocations and inventory projections. We will also discuss GasTrading, a module that enables Shippers and Transporters to buy or sell gas quantities for balancing purposes.

Martha Rendon, Muru Arumugam, Emerson

Social and Dinner

Networking Social

5:30 PM | 024 Lounge - The Westin

After an extensive day of Breakout Sessions, join us in the 024 Lounge on the 1st floor for our Networking Happy Hour. This is an ideal opportunity to mingle and make valuable business connections with other users. Drinks and appetizers provided.

Dinner – A Night on the Town

7:00 PM - Houston, TX

Shortly after the Networking Social, you're invited for a Night on the Town for dinner. Transportation will be ready by 6:45 pm in the hotel valet area. Please be sure to pickup your invitation from the reception desk.



Advanced Product Exploration and Discussions

Friday 9:00 am - 11:00 pm

PipelineManager | Azalea IV-V Ballroom

Deep Dive & Workshop

As we return to an in-person event, you will have the opportunity to interact live with our product SMEs. During this session, among other topics, we will review the changing cybersecurity landscape and how Emerson is keeping up-to-date with emerging TSA requirements.

Phani Kanakamedala, Hugh Robinson, Greg Morrow, Emerson

OSI - Monarch SCADA

Come and hear how an integrated solution of SCADA, Historian, Control Room Management (CRM) applications, and advanced pipeline applications can benefit any pipeline company, whether you have a small distribution pipeline or a large transmission pipeline system. This session will outline both some of the functionalities available in OSI's monarch, CHRONUS, and Continua offerings, together with the benefits of having a fully integrated solution that an entire pipeline company can use, especially when it comes to cybersecurity. OSI provides a platform solution that can be used for multiple industries, including power, renewables, water, and Oil & Gas, which this session will also showcase with some applicable customer case studies relating to green energy.

Lars Larsson, OSI – An AspenTech Business

PipelineStudio | Azalea VI Ballroom

Deep Dive & Workshop

Join us for this live product deep dive and training session where you will have the opportunity to interact in person with our product SMEs. We will be reviewing how PipelineStudio is being adapted to new sustainable energy markets.

Paul Dickerson, Jon Barley PhD., Robbie Keller, Emerson

PipelineOptimizer | Cedar Ballroom

Deep Dive & Workshop

PLO Superuser Tips & Tricks

Meet with our experts for deep dives into roughness tuning on models, how to navigate the PLO log file, modelling with flow rate triggers and more!

Abe Peña, Emerson

Scheduling for Pipelines | Willow Ballroom

Deep Dive & Workshop

Learn from our SMEs during this in-depth discussion and demo of Global Nominations, Cycle Planning, and Reporting in Emerson's Pipeline Scheduling Software.

Scheduler Team. Emerson

Scheduling for Terminals | Pecan Ballroom

Deep Dive & Workshop

During this session, our SMEs will provide in-depth discussion and demos of Preferred Locations, Split Pathways, and Work Orders in Emerson's Terminals Scheduling Software.

Scheduler Team, Emerson

Synthesis | Cypress Ballroom

Deep Dive & Workshop

Meet with our experts in person! Take the opportunity to interact live with our SMEs during this deep dive discussion on Synthesis in this Open Forum style session.

Randy Lisle, Bipin Pratihar, Rohan Awasthi, Emerson

Phased Implementation of Synthesis Modules

Synthesis has several modules which can be enabled and implemented in a phased manner as applicable. Mandy and Vic from Gibson Energy will talk about their experience of the recently implemented Invoicing Module in their system.

Mandy Adamowski & Vic Lit Chung, Gibson Energy

Gas Management Solutions | Pine Ballroom

Deep Dive & Workshop

Meet with our experts as we take an in-depth look into some of the recent features included in PipelineTransporter, TransactionManager and GasLoadForecaster. We will also train you on these newer features.

Clara Johnson, Alejandro Barrero, Emerson

Gas Commercial and Operational Integration – A Real Case Study and Demonstration

Gain a greater understanding of the convergence of gas commercial and operational pipeline capabilities by learning how to integrate PipelineTransporter and PipelineManager/ PipelineStudio.

Juliana Segura, Emerson



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