3rd Annual Connected Plant Conference
Harnessing Digital Tools to Drive Success

2019 EVENT HIGHLIGHTS

- 387 registrations
- 10 countries
- 55% of attendees were either electricity providers or CPI owners/operators
- 59 industry speakers
- 17 conference sessions
- Tour of NoDa Ultramodern MicroBrewery
- Interactive digital showcase
- Introduction to All Things IIOT Workshop

Hosted by POWER and Chemical Engineering, the 3rd annual Connected Plant Conference was held February 19-21 at the Sheraton Charlotte Hotel in Charlotte, North Carolina. The conference explored the fast-paced advances in automation, data analytics, computing networks, “smart” sensors, augmented reality, digitalization, IIoT, and other technologies that companies are using to improve processes and overall business in today’s competitive environment.
On Tuesday afternoon, attendees took a tour of NoDa Brewing Co., a unique microbrewery. The experience encapsulated both digital lessons, as well as age-old brewing wisdom.
**CONFERENCE SESSION HIGHLIGHTS**

Presenters explored the fast-paced advances in automation, data analytics, computing networks, “smart” sensors, augmented reality, and other technologies that companies are using to improve their processes and overall businesses in today’s competitive environment. Attendees left with actionable information and strategies to maximize the use of data, analytics, and related technology to drive efficiency improvements, preventative and predictive maintenance programs, and staff safety.

**GENERAL SESSIONS**

**Introduction to all Things IIOT Workshop**
Selected speakers and presenters helped educate attendees and get them started on the path to a stronger knowledge of how the industrial internet of things can help them in their job and their bottom line.

![Pavan Singh](image)

**Pavan Singh**, Sr. Director, Market and Business Development, Wind River discussed the foundation of IIoT and the 6 things you need to know.

**Opening Keynote: How Digitalization Is Transforming Business**
- Most attended General Session

![Matthew Labovich](image)

**Matthew Labovich**, US Data, Analytics and Technology Leader Industrial Products and Services, PricewaterhouseCoopers Advisory Services LLC

Matt Labovich, a partner at PwC who currently leads the multinational professional service firm’s U.S. data, analytics, and technology arm for its industrial products and services division, called attention to trends in data and analytics that are certain to transform business roles.

“The keynote was awesome. I loved hearing about using data, being smart about that data and driving action out of it — without action, data is just noise.”

— Andrew Attebery, Sales Engineer, Atonix Digital/Black & Veatch

**Plant/Enterprise to Network/Ecosystem Architecture**
This session focused on the architecture and the technologies that are available to help set up processes the right way, the first time around— or help correct mistakes for those already on the path.

![Salvatore DellaVilla](image)

**Salvatore DellaVilla**, CEO, Strategic Power Systems, Inc. ended the session speaking on Data Fusion: Transforming, analyzing, and acting on total plant data from multiple sources with a foundation in subject matter expertise is essential for effectively managing assets for optimum performance and profitability.

**New Technology Security Issues - Panel Discussion**
This panel reviewed the many facets of security at the plant level, including the legal aspects of protecting data, and implementation at the plant level. End-users on the panel shared lessons they have learned in the process.

![Charlene Mowery](image)

**Charlene Mowery**, VP Business, Cybersecurity SMEUltra Electronics, 3eTI was a crucial part of the panel discussion and spoke on intelligent monitoring and control: essential guidance for critical infrastructure security.

**How It All Comes Together - End User Case Studies**
Power and Chemical Processing companies shared their success stories on their way to a digital future.

![Michael Reid PhD](image)

**Michael Reid PhD**, General Manager of Technical Programs, Duke Energy closed the conference speaking on an integrated digital approach to condition based maintenance.

“Many platforms are available to capture, process and manage data for enhanced process availability and predictive maintenance opportunities. The key is determining what data to capture, what to do with the data and a plan to get there. This conference provides avenues to build the digital map that fits your needs.”

— 2019 attendee via post event survey
POWER GENERATION TRACK

The POWER GENERATION TRACK focused exclusively on technology for the power generation sector. Conference sessions addressed all stages of digital adoption from assess management to ensuring your data is secure in the cloud.

**How to Get Value Out of your Data**
This session helped show how to gain value from moving to a more-digital solution throughout the plant and utilizing that data to your benefit.

*Martin Gascon*, Senior Data Scientist and Product Manager, Intertek helped kick off the first POWER session with his presentation titled “Predicting Power Plant Remaining Useful Life using Machine Learning.”

**Risk Management**
In this session peers share case studies showing how analytics are used in their plants for risk assessment and management.

During this session, *Manjari Asawa*, Director, IoTWipro, shared her case study on Prognostic Maintenance of Turbines and Assets

**Plant Digitalization/Asset Optimization**
This session introduced the next step in the connected plant - how to increase efficiency through digitization, and reviewing the best solutions to asset optimization.

*Cynthia Mason*, Cloud Applications Services Manager, Siemens PLM Software, spoke on her experience with transforming operations with IoT.

Using Wireless, Digital, and Drone Technology to Enhance Plant Maintenance and Improve Efficiency
In this session, experts shared lessons learned from various projects that incorporated wireless solutions; optimized resources during shutdown, turnaround, and outage projects; and improved inspection techniques using drone technology.

*Patrick Saracco*, VP Technology Solutions, Cyberhawk, discussed Driving Efficiency Through Drone-Captured Data and Asset Visualization Software during this popular POWER session.

**Insuring Your Data is Secure in the Cloud**
This session helped attendees ensure that their information is secure even while using the cloud.

*Allen Kent*, NERC CIP Specialist, NAES, kicked off the final session of the POWER track with his presentation titled “BCSI storage on the Cloud: NERC CIP Compliance Concerns.”
CHEMICAL PROCESS INDUSTRIES TRACK

For the second year in a row, Chemical Engineering hosts a separate conference track for the chemical process industries. Within this track, attendees learn how others are adopting the latest digital technologies for process, product, and enterprise improvements.

Using Technology to meet Customer Needs
This session zeroed in on using data to provide information that can be used to better understand customers and meet their needs.

Kaytlin Henderson, Analytics Architect Specialist, The Dow Chemical Company, opened the Chemical Engineering track with her presentation on Mechanical Reliability in the Chemical Industry.

Improving Operations Through Digitization
This session emphasized the importance of remaining competitive through technologies such as virtual and augmented reality and machine learning.

Mark Becker, Senior Marketing Manager, Digital Solutions, Nalco Water, Nalco Company discussed how his company maximized heat exchanger performance and cost optimization with OMNI.

Risk Management
Speakers discussed how data analytics techniques are being used in their plants for assessing and managing plant, personnel and process risks.

Mark Becker, Senior Marketing Manager, Digital Solutions, Nalco Water, Nalco Company discussed how his company maximized heat exchanger performance and cost optimization with OMNI.

Improving Operations Through Digitization
This session emphasized the importance of remaining competitive through technologies such as virtual and augmented reality and machine learning.

Dr. Berk Birand, CEO, Fero Labs discussed a few myths, a lot of hype and some real success stories in AI for process industries.

Applications for Operations Optimization
This session discussed how cutting-edge applications help reach the goals of the connected plant by increasing efficiency, cost, quality, safety and compliance.

Anne-Marie Walters, Industry Marketing Director, Process & Resources, Bentley Systems, Inc., shared her experience with improving the reliability and efficiency of existing plants with immersive digital technologies.

Data Value
This session demonstrated the value proposition of moving toward fully digital solutions throughout the plant.

During the closing Chemical Engineering session, Richard Walker, Senior Product Marketing Manager, John Crane, Inc. presented on “Predictive Diagnostics for Pumps and Compressors – Learnings from IIoT Field Trials.”

“"This conference was a great way to elevate some conversations into what is new and cool, and what value is derived from the new capabilities.”

- 2019 attendee via post event survey
2019 SPEAKERS

ANUP AGGARWAL
Director of Digital Solutions
Structural Integrity

LARRY ALLS
Enterprise Digital Architect
ABB Inc.

MANJARI ASAWA
Director, IoT
Wipro

ANDREW ATTEBERY
Sales Engineer
Atonix Digital

GREGORY AUGSPURGER
Technical Manager - M&D Performance Center
Duke Energy

MARK BECKER
Senior Marketing Manager, Digital Solutions, Nalco Water
Nalco Company

DR. BERK BIRAND
CEO
Fero Labs

MATT BUCK
Senior Technical Leader
EPRI Electric Power Research Institute

RAHUL CHILLAR
Senior Director – Product Management Asset Performance Management
GE Power Digital Solutions

RYAN CONGER
Senior Business Consultant
Aspen Technology Inc

JOHN COX
Principal Analytics Engineer
Seeq Corporation

SALVATORE DELLA VILLA
CEO
Strategic Power Systems, Inc.

MICHAEL DESSAUER
Analytics Lead Architecture Specialist at The Dow Chemical Company Digital Operations Center
The Dow Chemical Company

SUNNY DIXIT
Data Analytics Engineer
TrendMiner

RODNEY DURBAN
Digital Lead
ABB

YARON EPPEL
CEO and Co-founder
Mobideo

MARTIN GASCON
Senior Data Scientist and Product Manager
Intertek

JAMES GOOSBY
I&C Support General Manager
Southern Company

MIKE GREENE
Operational Technology Lead
Nova Scotia Power

SREE HAMEED
Marketing Manager, Industry Business - Power segment
AVEVA

KAYTLIN HENDERSON
Analytics Architect Specialist
The Dow Chemical Company

CHRIS HINCE
Donaldson Company Inc

DAVID HIRSCH
President/CEO
Systran, Inc.

DR. JAMES HUNT
CEO
aicas GmbH

AARON HUSSEY
Founder & Principal
Integral Analytics, LLC

MR. ALLEN KENT
NERC CIP Specialist
NAES

RICK KEPHART
Vice President, Software Development
Emerson Power & Water Solutions

DEE KIMATA
Cyber Security and Collaborative Operations Center Product Manager
ABB Inc.

MATTHEW LABOVICH
US Data, Analytics and Technology Leader Industrial Products and Services
PricewaterhouseCoopers Advisory Services LLC

MIKE LAPROCIDO
Strategic Industry Advisor - Chemicals Energy & Natural Resources
SAP America, Inc

BILL LUTZ
Solutions Executive
Petrotechnics, a Sphera Company

DONALD MACK
DuPont Alliance Manager
Siemens

MICHAEL MAGERSTÄDT
Manager, Global Industry Division Chemical
KROHNE AG
2019 SPEAKERS

JASON MAKANSI
President
Pearl Street

SUSAN MALEY
Principal Project Manager
EPRI Electric Power Research Institute

PAUL MANCHESTER
Operations & Maintenance Manager-Generation
Silicon Valley Power

CYNTHIA MASON
Cloud Applications Services Manager
Siemens PLM Software

MICHAEL MERWALD
Performance Engineer
Black & Veatch

CHARLENE MOWERY
VP Business, Cybersecurity SME
Ultra Electronics, 3eTI

PAUL MUIR
President and Chief Revenue Officer
Mobideo

JAMES MURRAY
Plant Manager
Orlando CoGen

CHRIS NAUNHEIMER
Users Experience Director – Digital ABB Inc.

JONAS NORINDER
Industry Manager
Siemens Industry, Inc.

TOM O’BANION
Director- Chemical Industry Application Innovation
Emerson Automation Solutions, Micro Motion

MATT PETERS
Manufacturing Engineer
3M

MICHAEL REID, PHD
General Manager of Technical Programs
Duke Energy

BRIAN ROMANSKY
Director, Business Development
Owl Cyber Defense

PATRICK SARACCO
VP Technology Solutions Cyberhawk

BRIAN SAVOY
Senior VP Business Transformation and Technology
Duke Energy

MR. MARK SCHERLUEBBE
Senior Manager EY

JIM SIMMONS
Principal Consultant
DuPont

PAVAN SINGH
Sr. Director, Market and Business Development
Wind River

DR. YVES GORAT STOMMEL
Director Business Development and Innovation
Evonik Corporation

CHRIS STROHM
Sales Manager
Metso Flow Control-Performance Solutions

GREG TANCK
Asset Management Services Group
Black & Veatch

PAUL TIAO
Partner
Hunton Andrews Kurth LLP

JON TOWSLEE
Digital Engagement Leader, Industrial Automation Division, Power Generation & Water ABB Inc.

CRAIG TRUEMPI
Director of IIoT Reliability
ATEK Companies

MATT USHER
Charge Portfolio Lead
American Electric Power - AEP

JULIANNE WAGONER
Sr. Analytics Engineer
Seeq Corporation

RICHARD WALKER
Senior Product Marketing Manager
John Crane, Inc.

ANNE-MARIE WALTERS
Industry Marketing Director, Process & Resources
Bentley Systems, Inc

CHRIS WELCH
Rotational Development
Tennessee Valley Authority (TVA)

KELLY WHITENBERG
Performance Engineer
Black & Veatch

LIVIA WILEY
Marketing Director, Oil & Gas/Chemicals Industries
Aveva

BENJAMIN WINSLETT
Senior Security Analyst
Arizona Public Service

DR. STEPHEN ZITNEY
Process System Engineer
National Energy Technology Laboratory
The honored recipients of this award are individuals and teams, who through modern techniques associated with digitalization, have contributed to innovation, solved a problem, or made improvements. A Game Changer is a champion in the power generation and chemical process industries. Congratulations to the following well-deserved winners!

ROBINSON CASTILLO  
Senior Power Generation and Distribution Controls Engineer, Florida Power & Light Company  
Pioneering Wireless Power Plant Solutions. Castillo proved the value of technology by addressing an existing pain point with a wireless solution, which resulted in substantial improvements to operations and safety, all at a fraction of the cost of a traditional wired solution.

TED GUTIERREZ  
CEO and Co-founder, SecurityGate  
Streamlining Cyber Risk Assessments. A solution pioneered by cybersecurity firm SecurityGate, the Software-as-a-Service (SaaS) platform, empowers organizations to complete cyber risk assessments 10 times faster than manual methods.

JONATHAN ALEXANDER  
Operations Engineer, Albemarle Corporation  
Collaboration Transforms Analytics at a Chemicals Firm. Alexander used his sold initiative, organizational skills and innovative, holistic approach to lead two specialty chemical plants to successfully implement real-time analytics.

AMBER HAYTON  
Manufacturing Learning Advisor—Commercial, Margin Optimisation, and Operational Mastery, Royal Dutch Shell  
Digitalizing Industrial Expert Knowledge. Hayton spearheaded and managed the development of a unique effort to digitalize the expert knowledge of key trainers when her firm faced their retirement. The result is a virtual reality (VR) learning platform that offers a learning experience that is fully experiential and digital.

JOHNNY HOWZE III  
Plant Manager, Georgia Power Company  
Digitizing a Power Plant to Bolster Safety and Reliability. Howze pioneered the effort to turn Georgia Power’s 1982-built Plant Scherer — the largest coal-fired power plant in the country — into a connected plant of the future.

ASSET MANAGEMENT OFFICE  
Senior Technology Lead and Team, Nova Scotia Power  
A Power Company’s Dedicated Division for Connected Plant Efforts. The Asset Management Office (AMO) was tasked with managing the integration of the ever-growing body of data from third-party engineering companies, its 12-hour electronic operator rounds, the company’s cloud-based maintenance management systems, and other planning systems. The efforts yielded a novel system that includes predictive models, which give power plant personnel key insight into potential problems and help them make sound capital planning and investment decisions.

LEO SIMONOVICH  
Vice President and Global Head, Industrial Cyber & Digital Security, Siemens Energy  
Spearheading a Global Alliance to Ensure Trust and Security of Digitalization. Simonovich, who is responsible for the overall direction of Siemens cybersecurity efforts for Siemens Energy, has led efforts to develop Siemens global Charter of Trust cybersecurity framework. The Charter is dedicated to developing and implementing rules for secure networking.

NEXCERIS SENSORS GROUP  
Nexceris LLC  
A Much-Needed Focus on Safety in Energy Storage. Nexceris, a firm that offers high-performance sensors and monitoring systems for a broad range of applications, launched a novel sensor that monitors emissions that come from lithium-ion batteries when they are faulty.

PROAXION, INC.  
Development Team  
Removing Barriers for Increased Monitoring. An innovative startup, ProAxion designed and developed the TACTIX system, which uniquely and drastically simplifies the process of measuring, transmitting, and analyzing vibration and temperature data for remote monitoring of rotating machines.

MICHAEL REID  
General Manager, Technical Programs, Fossil Hydro Group, Duke Energy  
Spearheading a Major Utility’s Digital Transformation. Duke Energy, the largest utility in the U.S., began its digital transformation years ago under the leadership of Michael Reid, who is today responsible for partnering with internal business units to develop standardized, cost-effective technology solutions to continuously improve process efficiency and equipment reliability.

JOAN KNIGHT  
Innovation Director, Exelon Nuclear  
GRANT BRUMMELS  
Senior Manager, Corporate Engineering, Exelon  
Leveraging a Digital Platform to Enhance Fleet Performance. Exelon—a company that owns more than 35 GW of generating capacity—has leveraged capabilities offered by GE’s digital platform Predix to boost performance and reliability of much of its generating portfolio. Solutions the Innovation team developed under Joan Knight’s leadership include deployment of an asset performance management (APM) module across all its nuclear sites. At the same time, Exelon is rolling out GE Predix APM modules across its fossil generation fleet under the leadership of Grant Brummels.
2019 ATTENDEE DEMOGRAPHICS

ATTENDANCE BY TRACK

- 44% Power Generation
- 37% Chemical Process Industries (CPI)
- 18% Both

ATTENDEE CATEGORIES

- 53% Standard
- 24.3% Electric Power Producer
- 12.1% CPI
- 10.6% Other

Tipo de energía utilizada (productores) o interesado en (no-productores)

- 67% Gas natural
- 56% Renovables
- 48% Carbón
- 44% Petróleo
- 43% Hidroeléctrico
- 42% Nuclear
- 17% Otros

COMPANY TYPES

- 31% Tecnología producto o servicio proveedor
- 24% Electric Power Producer
- 9% Other
- 7% Machinery
- 2% Petroleum
- 2% Process Manufacturing
- 8% Chemicals

COUNTRIES REPRESENTED

- 387 asistentes de 10 países
- Estados Unidos
- Bélgica
- Canadá
- China
- Alemania
- Italia
- Japón
- México
- España
- Suiza

STATES REPRESENTED

- 94% de asistentes de los EE.UU. representando 34 estados
- Alabama
- Arizona
- Arkansas
- California
- Colorado
- Connecticut
- Delaware
- Distrito de Columbia
- Florida
- Georgia
- Illinois
- Indiana
- Iowa
- Kansas
- Kentucky
- Louisiana
- Maryland
- Massachusetts
- Michigan
- Minnesota
- Nueva Jersey
- Nueva York
- Carolina del Norte
- Ohio
- Oklahoma
- Pensilvania
- Carolina del Sur
- Tennessee
- Texas
- Utah
- Virginia
- Washington
- Virginia Occidental
- Wisconsin
2019 SAMPLE ATTENDEE LIST
Don’t miss these events hosted by POWER

**22nd Annual Electric Power Conference + Exhibition**

**Conference:** April 14-17, 2020  
**Exhibition:** April 15-16, 2020  
Colorado Convention Center  
Denver, CO  
2020.electricpowerexpo.com

**Educational Summit: APRIL 14-17, 2020**  
Colorado Convention Center  
Denver, CO  
prbcoals.com

**DISTRIBUTED Energy Conference**

**October 30 – November 1, 2019**  
The Gaylord Rockies  
Denver, CO  
distributedenergyconference.com

**COAL USERS’ GROUP**

**SOUTHEAST, April 15-17, 2019** | Atlanta, GA  
**NORTHEAST, June 10-12, 2019** | Boston, MA  
**ROCKIES & WEST, August 5-7, 2019** | Los Angeles, CA  
**MID-CONTINENT, September 9-11, 2019** | Chicago, IL  
**GULF COAST, October 7-9, 2019** | New Orleans, LA  
**US-MEX, November 11-13, 2019** | San Antonio, TX
Next year’s Connected Plant Conference is scheduled for February 25-27 in Atlanta, Georgia. The 2020 conference program will be designed for professionals who are leading digital adoption at all stages.

The advisory committee will solicit key presentations from industry leaders this summer. If you are interested in speaking opportunities, please contact Kim Arellano at karellano@accessintel.com or 713-343-1879.

For sponsorship and creative display opportunities, please contact Bridgett Green at bgreen@accessintel.com or 918-606-8373. We hope you will join us in Atlanta!