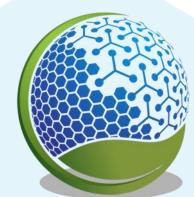
INDUSTRY 4.0 and IIOT

DIGITAL TWINS, PROCESS OPTIMIZATION and PREDICTIVE MAINTENANCE

BUSINESS MODEL SHIFTS: DATA ANALYTICS and SERVICE LED MODELS



REMOTE VIDEO AUDITING BUSINESS MODEL SHIFTS: ASSET LIGHT INNOVATION

CHEMTECH CONFERENCE 2020



DESCA's 1st annual ChemTech Conference brings together tech and science manufacturing to discuss the challenges and the opportunities in the digital transformation of the chemistry, biochemistry, advanced materials, animal health & nutrition industries.

> DELAWARE SUSTAINABLE CHEMISTRY ALLIANCE Guiding Pioneers Through the Business of Chemistry & Biochemistry



AN EVOLVING INDUSTRY LANDSCAPE

The commodity chemical industry is rapidly evolving – not just locally but globally. New customer and process data are enabling manufacturers to develop higher value product offerings and improve operational efficiencies. Business models are shifting towards higher value and companies are adapting; there is an increased focus on high-tech, digital offerings that offer enhanced features and improved service delivery to achieve higher earnings.

McKinsey & Co's study: <u>Digital Chemicals: from Technolo-</u> <u>gy to Impact</u> articulates the value that a digital strategy brings, both from an optimized, process improvement perspective as well as an improved customer-facing perspective. Additionally, Accenture makes a powerful case for R&D Digitalization in their study <u>Digital Disruption in</u> the Lab: The Case for R&D Digitalization in Chemicals.

While the concept of digital transformation and digital offerings can appear both overwhelming and costly, the good news is that it doesn't have to be either. And companies do not have to "go it alone" in this new landscape.



CHEMTECH CONFERENCE 2020

The ChemTech Conference 2020, organized by a committee of industry leaders in the chemical, advanced material, animal nutrition, poultry and technology industries brings together experts in digital transformation, companies who have effectively implemented digital strategies, and those seeking solutions to digital transformation questions. Among the sessions to be covered in this conference:

DIGITAL TECHNOLOGIES & PROCESS IMPROVEMENT

What innovation is emerging to in terms of process optimization & improvement? IIOT and Industry 4.0 are changing operations: from predictive maintenance to video auditing to demand forecasting. What is on the horizon?

HOW DIGITAL IS CHANGING SALES & MARKETING

Customer journey mapping, digital feedback mechanisms, and customer engagement from POS to post sale. How does technology impact the customer relationship across the value chain?

BUSINESS MODEL SHIFTS

Digital technologies are driving the move towards alternative business models, including service led models performance pay models, IP based models and more. What are the biggest challenges that companies face in terms of changing business model shifts, and how will these shifts disrupt industry?

CYBERSECURITY

As we gather more data, how do we share and secure data against malicious corporate attacks.

ROUNDTABLE DISCUSSIONS

Industry/theme based round table discussions hosted by industry experts designed to network with peers and brainstorm solutions to common industry issues.

PROGRAM OF EVENTS Day 1



8:30 AM—9:00 AM Registration & Networking

> 9:30–10:00 AM Keynote Address

11:30-1:00 PM

Buffet Lunch

9:00 AM-9:30 AM

Welcome Remarks

10:00-11:30 AM

Anticipating Change: External Digital Factors that Are Influencing Business

1:00-2:00 PM

Breakout Session 1: Digital Technologies & Operational Excellence Manufacturing & Supply Chain OR R&D Acceleration (internal)

3:00—3:15 PM Networking Break

4:30—6:30 PM Networking & Hors d'Oeuvres

11:30 AM—4:30 PM–Meeting areas will be available for one-on-one meetings in 20 minute blocks. Make sure to check our website to sign up for meeting availability.

2:00–3:00 PM Breakout Session 2: Digital Technologies & Operational Excellence Marketing & Sales OR R&D Acceleration (open innovation)

> **3:15–4:30 PM** Company Hosted Roundtable Discussions Topics to be advised

PROGRAM OF EVENTS Day 2



8:30 AM-8:50 AM

Registration & Networking

9:00-9:30 AM

Keynote Address

8:50—9:00 AM Welcome Remarks

9:30-10:30 PM

Morning Breakout Session: New Business Models Alternative Transaction Models OR Data Analytics Led Service Models (Full Stack Solutions) OR Trust Driven/Influencer Models

10:30-10:45 AM

Networking Break

10:45-12:15 PM

Cybersecurity

12:15-1:30 PM

Buffet Lunch

2:30-3:30 PM

Afternoon Breakout Session: Investment Opportunities in the New Landscape Precompetitive Digital Opportunities OR Conversation: Where should government be Providing Non-Dilutive Support OR Assessing the Value of Digital for the Investor **1:30–2:30 PM** Investment Opportunities in the New Landscape

3:30–3:45 PM Closing Remarks

9:30 AM—4:30 PM-Meeting areas will be available for one-on-one meetings in 20 minute blocks. Make sure to check our website to sign up for meeting availability.





9:30-10:00 AM-Keynote Address

10:00—11:30 AM—Anticipating Change—External Factors that are Influencing Business

Digital technologies have the potential to shift value chains, end markets and demand patterns. Will self-driving cars improve traffic safety, and if so, how would this impact coatings manufacturers that supply the automotive industry? Will the increased use of drone technology impact the use of crop-protection chemicals in the ag industry? How are companies pre-empting and adapting to these evolving dynamics?

1:00—2:00 PM—Digital Technologies & Operational Excellence Manufacturing & Supply Chain

What are the newer technologies that are creating opportunities to improve manufacturing outputs and supply chain efficiencies? Our panelists talk about IIoT, digital twins, predictive maintenance, remote video auditing and more.

OR

R&D Acceleration (Internal)

Many practices that are established in the pharmaceutical industry are beginning to be adopted by chemical companies as the cost of computing decreases. Advanced and predictive analytics are being used to rapidly develop and adjust molecules, simulate experiments and learn from past successes and failures. How these are being used in conjunction with open innovation to accelerate innovation and commercialization.

2:00—3:00 PM—Digital Technologies & Operational Excellence Sales & Marketing

In the case of chemical companies, digital technologies can increase ROS by 3 percentage points or more. Some of these technologies include digital-led decision making, advanced analytics-enabled pricing systems, AI and digital go-to-market channels. How these are changing the way we understand customers.

OR

R&D Acceleration (Open Innovation)

As the chemical landscape is changing, more and more companies are looking open innovation, joint development and M&A activity, coupled with an increased focus on high -tech and digital offerings. How are companies partnering with innovators and tech companies to maintain an accelerated pace in innovation?

SESSIONS Day 1—3:15—4:30 PM

COMPANY HOSTED ROUND TABLE DISCUSSIONS

These will be updated as information is received. For information on how you can host a round table discussion, please contact:

Dora Cheatham at doracheatham@desustainablechem.org or

Nick Strickland at nick.strickland@desustainablechem.org

HOST

DISCUSSION TOPIC

1	РТС	Augmented Reality Discussion Leader: To be confirmed					
2	OneMagnify	Developing a B2B Search Marketing Strategy Discussion Leader: Fred Freestone					
		In this session, B2B Search Engine Marketing (SEM) strategic foundations will be examined. Topics will include SEO (Search Engine Optimization), PPC (Paid Search Marketing), strategic keyword selection, business versus onscreen competitors, and more.					
3	Cyber 20/20	Cyber Security Discussion Leader: To be confirmed					



SESSIONS Day 2



9:00–9:30 AM–Keynote Address

9:30—10:30 PM—New Business Models Alternative Transaction Models

Moving from a pure product sale transaction to alternative models such as monitoring chemicals in industrial applications or performance pay models. The concept of selling LESS product seems counter-intuitive—especially to a sales executive—but the company is effectively creating much greater value both from internally and externally. How and why do the newer models work?

OR

Data & Analytics-Led Service Models (Full Stack Solutions)

New data is flowing into manufacturing companies from systems such as SAP, and from Social Media, platforms enabling leaders to gain insight like never before. Learn how leaders are converting these new insights into higher value product and service offerings.

OR

Trust Driven/Influencer Models

Social media platforms such as Twitter, Facebook, Instagram, and LinkedIn have created an open forum for anyone to share anything. On these platforms, thought leaders are emerging because more and more people follow their posts and shares. Leaders in manufacturing with billions of dollars in assets must also be thought leaders on social media to build and protect their brands in the minds of future customers to continue to have a relationship with new customers and earn their trust in a digital world.

10:45–2:15 PM–Cybersecurity

Manufacturing crosses multiple sectors of US critical infrastructure, from the chemical industry to defense. Accordingly, manufacturers are targeted by sophisticated Artificial Intelligence Cyber Threats from aggressive nation-state adversaries, transnational organized crime, and others intent on declaring cyber and economic war on the US. Cyber attacks can now result in the physical destruction of manufacturing operations, as well as disruption of services, as illustrated in the 2014 cyberattack against a steel industry manufacturing plant in Germany. This session talks about concerns, best practices, and initiatives companies should take to protect their financial, intellectual property, and reputation assets.

SESSIONS Day 2



1:30-2:30 PM—Investment Models in the New Landscape

Chemtech investment models require deep consideration. New technology development in legacy chemical is perceived as slow, costly and physical capital intensive. Accordingly, strategic investment has become more risk adverse, and institutional venture capital is disproportionately low. New investment models must be considered that address speed, cost and capital allocation, such as technology development towards incremental, smaller/ higher value market wins in near term. Additionally, changes in institutional investment will be considered such as filling the gap in investment talent, harmonizing return timelines with commercial deployment, and designing heuristics for pre-revenue company valuations.

1:30–2:30 PM–Investment Opportunities

Precompetitive Digital Opportunities

How do we identify digital opportunities that benefit an entire industry through conversation and collaboration?

OR

Conversation: Where Should Government be Providing Non-Dilutive Support

How can industry and government communicate so that government is better informed on economic growth opportunities through innovation?

OR

Assessing the Value of Digital on These Industries for the Investor

Manufacturers have invested in control systems to improve productivity since the 1950s. Today, digital twins, artificial intelligence and machine learning technologies are coming to market so fast it is hard to make sense of where to invest. Industry leaders will discuss what areas offer the most value based on their experience.

SPONSORSHIP OPPORTUNITIES

For more information on sponsorship opportunities, please contact:

Dora Cheatham at dora@desustainablechem.org or

Nick Strickland at nick.strickland@desustainablechem.org



MEMBERSHIP BENEFITS	Host Sponsor (1 only) \$20K			Lunch Sponsor \$15K	Gold Sponsor \$7.5K	Silver Sponsor \$5K	Bronze Sponsor \$3.5K	Alliance Partner \$2K
Welcome remarks at opening of conference. Present session at conference (session TBD)	۲							
Seat on 2021 planning committee	۲			۲				
Opportunity to host/lead round table discussion		۲		۲	۲			
Targeted marketing and social media impressions (see below for details)	minir	evel 1 num100 pressior	,000,	Level 1 minimum100,000 impressions	Level 2 minimum 52,500 impressions	Level 3 minimum 37,500 impressions		
Table display at event		۲		۲	۲	۲	۲	
Complementary registrations		10		7	5	3	1	1
Program ad	Fu	Full page		Full page	Full page	Half page	Half page	
Logo on event promotional material materials, website landing page and e-blasts		۲		۲	۲	۲	۲	۲
Logo on all event signage and event program		۲		۲	۲	۲	۲	۲

Targeted social media advertising within a geotargeted area and to a demographically selected audience. Promote your round table discussion or exhibit table, or let people know you're available for one-on-one meetings!

Level 1: Minimum 100,000 impressions

- Pre/Post Event LinkedIn, Facebook, Instagram Ads
- Facebook/Instagram geofence day of event
- Retargeting post-event
- Digital billboards

Level 2: Minimum 52,500 impressions

• Pre/Post Event LinkedIn, Facebook, Instagram Ads

Level 3: Minimum 37,500 impressions

• Pre/Post Event Facebook, Instagram Ads