

Welcome

Dave Hokanson
Chair, ACOWUG Board of Directors

ACOWUG

AC&O World User Group

- A word about our Anti-Trust policy
- State of the WUG
- ACOWUG Board of Directors
- What we've done: Sharing Information & User-Suggested Software Enhancements
- Charter Changes
- BoD Election – Your community needs you
- Thanks / Recognition

ACOWUG Anti-Trust Policy

- Background:
 - The activities of the ACOWUG are subject to the legal limits of US and international antitrust laws.
 - The ACOWUG is committed to complying with the antitrust laws in all respects.
- Guidance – **Do Not**
 - Share your company's confidential or proprietary information
 - Discuss or make agreements, either explicitly or implicitly, regarding prices of particular products or services of a company
 - Discuss or forecast prices for goods or services
 - Discuss your company's purchasing plans for particular products or services
 - Discuss your company's specific merger/divestment plans, market allocation, development plans, inventories and costs -- only publicly available information may be discussed or shared
 - Share or discuss your company compliance costs, unless information is publicly available
 - Discuss your companies strategies for complying with government actions or various economic scenarios

State of the WUG

- AC&O WUG is:
 - The most active User Community of AspenTech Products

- Active Participation in:
 - Webinars – 7 during the past year - more than 3400 people registered!
 - User Enhancement Requests – 62 condensed to 15 top requests
 - User Group Meetings – Terneuzen and Houston

- Bottom line – the ACOWUG is healthy!!

2016-2018 Board of Directors



▣ Dave Hokanson – ExxonMobil, Chair



▣ Darryl DeHaan – LyondellBasell



▣ David Boswell – Chevron



▣ Nicholas Alsop – Borealis

2017-2019 Board of Directors



■ Doug Robertson – Marathon – Vice Chair



■ Livia Tizzo – Braskem



■ Aico de Volder – Dow



■ Sriram Ramaganesan – Phillips 66

Board of Directors - AspenTech



- AspenTech Nominated Member
 - Alex Kalafatis



- AspenTech Product Marketing
 - Tushar Singh



- AspenTech Product Marketing
 - Rachel Lowell

BoD – What We Do

- Responsibilities:
 - Board members represent the interests of the user community – not just the interests of your company
- Time commitment:
 - 1 to 2 hours telecons per month (usually bi-weekly)
 - Typically 1-2 hours/month of follow up activity
 - Attendance at the annual meeting
- Assisting with preparation and execution of the annual meeting program including:
 - Contributing to agenda
 - Soliciting presentations
 - Chairing sessions
- Reviewing AC&O community feedback to prioritize user-submitted enhancements
- Contributing to decisions on AC&O User Group business

2017-2018 – Sharing Information

- Organized Adv Ctrl Sessions at Optimize 2017 (April 2017)
 - 12 presentations / 172 advanced control attendees
- Successful AC&O webinar series: 7 webinars – 3400+ total registrations
 - **Role of Regulatory Control within Model Predictive Control** – Mark Darby – March 27, 2018
 - **Increase Production and Reliability in Upstream Operations** using AspenTech's APC Solution – Mike Piccolo and Alex Kalafatis - March 8, 2018
 - **APC: An Epic Journey from Flatline to Frontline** - Prakash Karpe - Feb 2018
 - **Improved Advanced Control Performance using DMC3™ Calibrate** – Dave Hokanson & Roger Hall - November 14, 2017
 - **How The Dow Chemical Company Realized Operational Excellence With Real-Time Optimization** - Rahul Bindlish - October 5, 2017
 - **Energy Optimization and Process Variability Reduction in Ethylene Plants** – Lívia Tizzo - September 28, 2017
 - **DMCplus: The Bucket List** – Eduardo Arrieta – June 15, 2017

Software Recommendations v10 & Beyond

- 2016, 30 recommendations for v10; DMCplus & DMC3 v10 includes:
 - “Prediction Only” Curves (STCRVxxx = 3 fully supported)
 - Variable Deadtime and Time Constant
 - Rank 1000 CVs in SmartTune
 - Copy / paste model curves to the master model in DMC3 Builder

- 2017, 19 recommendations for future versions; Actively working on
 - Future Trajectories for Feed Forward Variables
 - Integrate Aspen IQ monitoring with Aspen Watch

Current Software Recommendations

- 62 condensed to 15 top-priority recommendations
 - 3 - On-line
 - 5 - DMC3 Builder
 - 1 - Composite
 - 1 - IQ
 - 2 - Web Server
 - 2 - AspenWatch
 - 1 - Adaptive Control

- AspenTech Development Team Review - May 31, 2018

- Next cycle: Full membership enhancement input / voting

Charter Changes

- Revisions required due to recent 2017 Board of Directors election and move (over the last few years) to e-mail voting
 - One company dominated the vote – voted only for their nominee
 - Tie for 4th member

- Revisions clarify how to handle these situations
 - Eligible voters: APC / RTO practitioners and direct supervision
 - Voters required to choose a minimum of 3 nominees
 - Board of Directors can decide membership if there is a tie.

Time to vote on charter changes

BoD – You Are Invited!

- The AspenTech AC&O community is vibrant and active
- We would like the Board of Directors to represent all users
 - Over the last 5 years growing Board representation from US-focused to a healthy North America / South America / Europe mix.
 - We would like to spread that even further - include more of the user base from around the world
 - Present Board representation covers roughly 50:50 Oil Refining and Chemicals. We welcome broader industry representation.
- Board membership provides opportunities for networking with people in other company cultures and other countries, growing career relevant skills and contributing to the community!!

BoD Elections - We Need You!

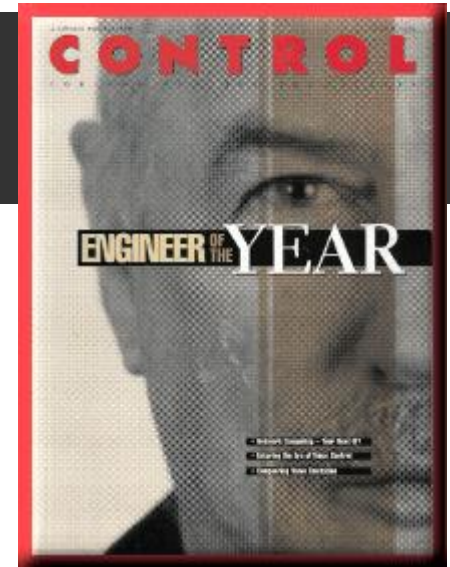
- Election Process:
 - 2 year term (staggered terms - 4 new BoD members each year)
 - Nominations May 7 – June 8, 2018
 - Nominations accepted online
<http://www.aspentech.com/ACOBoardElections/>
 - Nominate yourself or ask another group member to nominate you
 - Only one person from a company may be on the board at one time
 - Continuing board members represent Braskem, Marathon, Dow, and Phillips 66.
 - Please do not nominate individuals from these four companies for this cycle
 - Ballots will be sent out shortly after the nominations close.
 - Voting during June 11-18, 2018, results will be available in the week of June 25

BoD Recognition & Appreciation

- Sean Goodhart – Previous BoD Chair
- Doug Robertson – Vice Chair; product enhancement coordinator
- Tushar Singh and Rachel Lowell – AspenTech Marketing
- Alex Kalafatis – AspenTech Product Management
- The University of Houston, Department of Chemical Engineering
 - Prof. Mike Harold, Ms. Nicolette Solano
- Dow Chemical
 - Terneuzen Meeting - Aico de Volder
 - Webinar by Eduardo Arrieta (hosted by Dow)
- And... the ultimate appreciation award: Dr. Charles Cutler

Dr. Charles R Cutler

- Inventor – Dynamic Matrix Control
- Worked for Shell US – 1961 – 1984
 - Left as Shell US process control manager
- Founded DMC Corporation in 1984
 - Products: DMC & DMO (Real-Time Optimization)
- DMC Corporation sold in 1996 to AspenTech
- Founded Cutler Technology Corporation (CTC) in 1999
 - Advanced process control software
- CTC Acquired by AspenTech in 2018



ACOWUG

ADVANCED CONTROL & OPTIMIZATION WORLD USER GROUP

Ultimate Appreciation Award

PRESENTED TO

CHARLES R. CUTLER

For Your Contribution to Advanced Process Control

Enabling a Generation of Engineers to Improve the
Efficiency and Profitability of Our Industries through
Technology You Pioneered

June 2018

Thank you

Dave Hokanson

Chairman, Board of Directors

ACOWUG