Management Division Highlights

Exciting Program at the Annual Meeting and other Initiatives

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In this newsletter you can find a detailed program of sessions sponsored and cosponsored by our division at the Annual Meeting taking place in Pittsburgh at the end of October and early November. One of the highlights is the session titled "Rising to the Challenge: Successful Leadership in Uncertain Times" where we will honor the recipient of the 2018 Management Award. This session, scheduled on Tuesday, October 30, 2018 at 12:30 pm at the David L. Lawrence Convention Center 331, will include a presentation by Gayle J. Gibson (2018 Management Award recipient) where she will talk about leading engineering through company transformation. You can read the summary of her talk in page 8 of this newsletter. The presentation will be followed by a panel including previous Management Award recipients (Kenneth Rueter 2016 and Markus Scheller 2015) who will give brief talks about the impact of mergers and repurposing of previously contaminated facilities. The panel composed of three Management Award recipients will then address questions related to management leadership topics submitted by the panel organizers as well as session attendees. If you plan to be in Pittsburgh for the Annual Meeting, please consider joining us at this session.

Our initiative to invite recent chemical engineering graduates to become members of the Management Division seems to be progressing well. An invitation was sent in August 2018, resulting in a good number of new members accepting our offer. Our challenge now is to get these new members interested and involved in our ongoing activities and programming.

I also want to remind you to visit our division website for information about our activities and initiatives, or the Management Division LinkedIn group created earlier this year. I am happy to report that participation in the LinkedIn group (https://www.linkedin.com/groups/12101021) continues to grow, with 70 participants as I write this message. Please join this group if you haven't already.

Exciting Program at the Annual Meeting and other Initiatives (Continued)

In page 15 of this newsletter you can find a list of positions we want to fill in our upcoming election of officers and directors. Please contact Mark Swientoniewski (mswientoniewski@stratag.org), Past Chair, if you would like to get more involved. I welcome your feedback and ideas for which I encourage you to write to me at fia@htri.net.

Fernando J. Aguirre, PhD, PE, FAIChE Chair, AIChE Management Division



AIChE Management Division Service Award for 2019

The deadline for submitting nominations for the 2019 award is November 30th. The award recognizes an individual member of the Division for outstanding service and exemplary demonstrated leadership in the Division for an extended period of time. This award is presented annually but only if qualified nominations are forthcoming. The recipient is expected to attend the Spring Meeting to accept the award at the Division's Spring Meeting dinner and is eligible to receive up to \$1,000 to deter necessary meeting expenses. The recipient also receives a plaque and permanent recognition on the AIChE website.

Nominations from a member of the division can be by e-mail and should contain a succinct summary of the nominee's service and leadership and can be accompanied by up to three letters from co-sponsors. Nominations should be sent to the Chair of the Management Division Awards Committee, George Newcomb (geonewcomb@gmail.com). Refer to https://www.aiche.org/community/awards/management-division-service-award on the AIChE website to download the Nomination form and for more details on this award and past winners.

This award is a significant honor for those who have made important contributions to the Division over a long period of time but remember a nomination must first be submitted so please consider submitting a package by November 30th which is just around the corner.

2018 AIChE Annual Student Conference— Saturday, October 27, 2018 -10:45 am to 4:30 pm

This year's workshop program has been organized into 7 subject tracks to help students decide which sessions they would like to attend.

Also new for 2018: The AIChE Board of Directors will be hosting a special Town Hall event, which will take place from 10:45am-11:30am during the Saturday Workshops. All are welcome to attend.

The Management Division is presenting its annual Careers in Management session as part of Track III.

3:45pm - 4:30pm: Careers in Management

Presented by: Joe Cramer, Mark Swientoniewski, Richard Siegel, and Rosemarie Wesson,

Management Division

This session provides a short presentation on careers in management for chemical engineers, followed by a panel discussion with questions and answers from a group of experienced managers with backgrounds in industry, government, consulting, and academia. The session should be of great interest to any student who may consider the possibility of seeking a management position at some time in his or her career. *David L. Lawrence Convention Center*

- 317/318

We would like to draw your attention to another presentation within Track III. One presenter is Joe Cramer, Vice-chair of the Management Division.

10:45am - 11:30am: Pathway to Licensure: The FE (Fundamentals of Engineering) and PE Exams

Presented by: Joseph Cramer and William Parrish, Licensing and Professional Development Committee

This session gives an overview of how to become a Professional Engineer and emphasizes the Fundamentals of Engineering (FE) Exam which is the first of the two exams needed for licensure. The new Computer Based Testing (CBT) exam for both the FE and PE Exams is illustrated. The presentation reviews why many might want to become a PE. It demystifies the licensure process and tells about the two required exams. The presentation explains the benefits of taking the FE Exam for students about to obtain their first professional degree and how this increases the young professional's career opportunities.

David L. Lawrence Convention Center

- 317/318

2018 AIChE Annual Meeting Management Division Sessions

Monday, October 29, 2018 8:00 to 10:30 am

80 FEW Nexus: Emerging Chemical Engineering Innovations from Micro-Scale Innovations to Complex, Interconnected Systems

(Invited Talks)
Co-Sponsored
Fengqi You, Cornell University, Ithaca, NY,
Dale Keairns, Deloitte Consulting LLP, Pittsburgh, PA and
Nada Marie Anid, School of Engineering and Computing Sciences, New York Institute of Technology,
New York, NY

SYNOPSIS

How do we think differently about complex interconnected system challenges? What are the metrics that inform and guide decisions? How is fundamental chemical engineering research at a range of temporal and spatial scales translated to impact societies? The forum also provides opportunities to share experiences from on-going Nexus projects. Please consult the online program for the most up-to-date information.

David L. Lawrence Convention Center

- 317

Monday, October 29, 2018 11:00 am to 12:30 pm

120 The Future of Energy in the Region, Nation and World

(Invited Talks)

Co-Sponsored

J. Karl Johnson, Department of Chemical & Petroleum Engineering, University of Pittsburgh, Pittsburgh, PA and

Cliff Kowall, Process Innovation & University Collaboration, The Lubrizol Corporation, Wickcliffe, OH; Process Development Department, Process Innovation & University Collaboration, Wickliffe, OH

SYNOPSIS

What will the future sources of energy be? What is the path to truly sustainable energy? How will our energy portfolio evolve in the near- and long-term future? This session consists of three invited plenary talks from thought leaders giving regional, national, and world views of the future of energy. The session will end with a panel discussion.

David L. Lawrence Convention Center

- Spirit of Pittsburgh B

12:30 to 3:00 pm

163 Managing Yourself: Reinventing Yourself for Your Next Role

Donna Bryant, Syngenta, Baton Rouge, LA

Co-chair: Quinta Warren, Engineering Research Consultant, Houston, TX

SYNOPSIS

Transitioning to new roles requires us to determine what our transferrable skills are. This is especially true when we are moving to roles where we have no direct experience. This session will focus on teaching how we can use job descriptions to tailor our experience to show future employers how we can fit into their organization.

David L. Lawrence Convention Center

- 331

Monday, October 29, 2018 3:30—6:00 pm

211 Chemical Engineers and Policy-Making

Quinta Warren, Engineering Research Consulting, Houston, TX;

SYNOPSIS

Chemical Engineers can take many paths including academia, industry and private research. Rarely is policy-making talked about as a viable option. It is important for scientists and engineers to play a role in creating and implementing policies. This session will cover different ways that Chemical Engineers can be a part of policy-making.

David L. Lawrence Convention Center

- 331

246 World Cafe: Food-Energy-Water Nexus

(Invited Talks)

Co-Sponsored

Leslie M. Shor, Department of Chemical and Biomolecular Engineering, University of Connecticut, Storrs, CT,

JoAnn S. Lighty, Boise State University, Boise, ID,

Nada Assaf-Anid, School of Engineering and Computing Sciences, New York Institute of Technology, New York, NY and

Dale Keairns, Deloitte Consulting LLP, Pittsburgh, PA

SYNOPSIS

The affordable production, security, and safety of Food, Energy, and Water resources (the FEW Nexus) can no longer be addressed in isolation. The complicated world structure and global connections result in a complex system problem with the search to balance local needs and complex global connections. New frameworks, methodologies, and tools that account for diverse stakeholders are needed to manage the Nexus. Chemical engineers bring important understanding, skills, and gifts to address this problem. The session highlights contributions and integration among academia, industry, and government for addressing the Nexus. Please consult the online program for the most up-to-date information.

David L. Lawrence Convention Center

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Tuesday, October 30, 2018 8:00 to 10:30 am

290 Innovation from Beginning to End: Generating Ideas, Working with People, and Managing Projects

Eldon Larsen, AIChE Management Div

SYNOPSIS

This is a workshop, with invited speakers only, designed to overview the entire research process from conception to project management completion.

David L. Lawrence Convention Center - 331

Management Division Meeting 11:00 to 12:00 David L. Lawrence Convention Center - 331

11:00 am to 1:30 pm

311 What the Heck Happened? Past, Present & Future Disruptions to the Chemical/Fuels Business

(Invited Talks)

Co-Sponsored

Cliff Kowall, Process Innovation & University Collaboration, The Lubrizol Corporation, Wickcliffe, OH and **J. Karl Johnson**, Department of Chemical & Petroleum Engineering, University of Pittsburgh, Pittsburgh, PA

SYNOPSIS

This session will focus on major disruption forces since the 60's and their impact on the chemical business and chemical engineering. 5 disruption forces: 1) the oil crises of the 70s; 2) the financial raiders of the 80s & 90s; 3) the divesting: rise of the pieces; 4) hedge funds & short term gain and 5) rise of natural gas due to hydraulic fracturing.

David L. Lawrence Convention Center

Spirit of Pittsburgh A

<u>Tuesday, October 30, 2018</u> 12:30—3:00 pm

348 Rising to the Challenge: Successful Leadership in Uncertain Times

Chair — Fernando Aguirre, HTRI, Co-Chair — George Newcomb, Newcomb Associates, Earlysville, VA and Co-Chair — Joseph Cramer, Program Development, AIChE, Hendersonville, NC

Management Division's 2018 Award Recipient, Gayle Gibson, DuPont, will speak on how to maintain strong engineering capabilities during periods of major corporate transformation. This award recognizes her achievements over a successful 34 year career at DuPont which culminated with her efforts as Director of Engineering during the recent DowDuPont merger.

After her talk, she will then be joined in a panel by Markus Scheller, an experienced industrial executive, and Kenneth Rueter, President of UCOR to discuss critical factors associated with transformations, mergers and major site restorations and address audience questions.

12:35 PM <u>348a Leading Engineering through Company Transformation</u>

Gayle Gibson, E.I. DuPont de Nemours & Co., Engineering - retired; Newark, DE

SYNOPSIS

Many companies have been through recent transformations whether it has been major mergers, acquisitions or other significant changes from cost cutting to market shifts. With more change on the horizon across our industry, what learnings can be applied proactively to ensure strong engineering capability is there to meet the company's mission? Personal leadership insights will be shared using DuPont's recent evolution as an example.



<u>Tuesday, October 30, 2018</u> 12:30—3:00 pm (Continued)

01:25 PM 348c Merger...What...Who?

Markus Scheller, Self-Employed, Zurich, Switzerland

SYNOPSIS

Why do most mergers fail? This is a fundamental question. Very seldom is a successful new organization created as a result of a merger. Legacies of the old organizations and underestimation of human dynamics, lead to mediocre compromises, as the emotions, needs and concerns of the involved people are consistently neglected. Of course, it is easier to start a new company. If a merger is necessary, then the important factors impacting the outcome need to be considered. These factors are the subject of this discussion.

01:50 PM 348d Historic Department of Energy Site Transformed to a Private Sector Industrial Park

Kenneth Rueter, UCOR URS | CH2M Oak Ridge LLC, Oak Ridge, TN

SYNOPSIS

The U.S. Department of Energy's (DOE) East Tennessee Technology Park (ETTP) in Oak Ridge, TN is undergoing a dramatic transformation from its historic national security role as a uranium enrichment plant with all of the challenges posed by aging and contaminated facilities. Once-contaminated land and buildings are being repurposed as a multi-use private sector industrial park that will be home to new businesses and include structures commemorating the site's historic contributions to defense and energy missions as part of the Manhattan Project National Historical Park, as well as large areas placed in conservation.

Tuesday, October 30, 2018

02:15 PM 348b Panel Discussion:

Gayle Gibson, E.I. DuPont de Nemours & Co., Engineering - retired; Newark, DE, Ken Rueter, UCOR URS | CH2M Oak Ridge LLC, Oak Ridge, TN Markus Scheller, Self-Employed, Consultancy, Zurich, Switzerland

SYNOPSIS

The speakers, Ms. Gibson, Dr. Scheller and Mr. Rueter, have diverse professional, geographical and cultural backgrounds and have had a very different mix of senior leadership responsibilities. They will participate in a moderated discussion designed to explore not simply management skills but their insights into changing leadership attributes. Questions will also be fielded from attendees.

David L. Lawrence Convention Center - 331

3:30-6:00 pm

384 AIChE's 110 Year Celebration

(Invited Talks)

Cosponsored

Lorenz T. Biegler, Chemical Engineering, Carnegie Mellon University, Pittsburgh, PA, J. Karl Johnson, Department of Chemical & Petroleum Engineering, University of Pittsburgh, Pittsburgh, PA and

Cliff Kowall, Process Innovation & University Collaboration, The Lubrizol Corporation, Wickcliffe, OH

SYNOPSIS

The first meeting of the American Institute of Chemical Engineers was held in Pittsburgh PA, December 1908. Our profession has seen dynamic and profound change in the 110 years since that inaugural meeting. This session will look at the future of chemical engineering through the eyes of thought leaders from industry, academia, and national laboratories.

David L. Lawrence Convention Center -303

Tuesday, October 30, 2018 3:30—6:00 pm

385 Applied Project Management Fundamentals: A Tutorial

Eldon Larsen, AIChE Management Div.

SYNOPSIS

This session is a Project Management Tutorial which provides the participant with an excellent overview of the applied fundamentals of project management. The session will be especially helpful for Young Professionals and for upper-level students soon to be Young Professionals, as these people have a very high probability of becoming project managers and project team members very early in their careers. The session will also contain information that experienced project managers will wish that they had known years ago, in order to achieve project success.

David L. Lawrence Convention Center - 331

<u>6:30— 9:30 PM</u>

Management & Environmental Divisions / Chemical Engineering & The Law Forum Group Dinner

Fee: 65 USD
The Carlton Restaurant, 500 Grant St. Pittsburgh

Wednesday, October 31, 2018 8:00—10:30 am

450 Department Heads Forum

(Invited Talks)

Co-Sponsored

Valerie L. Young, Department of Chemical and Biomolecular Engineering, Ohio University, Athens, OH and

Edward J. Maginn, Chemical and Biomolecular Engineering, University of Notre Dame, Notre Dame, IN

SYNOPSIS

This session is the annual meeting of chemical engineering department chairs. A panel of invited speakers and department chairs will share their experiences on current topics important to department chairs.

2019 AIChE Spring Meeting—Program

(March 31— April 4, 2019)

(Please note—due date for abstract submissions is Nov. 12, 2018)

Please visit: https://aiche.confex.com/aiche/s19/cfp.cgi

Ethical Issues in Safety

Cosponsored By:

Perspectives on Process Safety from Around the World (T1E) Process Safety Spotlights (T1F)

SYNOPSIS

Chemical Engineers are challenged by competing priorities in their work places. Protection of public, coworker, and personal safety is a value that is not compromised by other priorities. But is it? There are deadlines and other essential business that also has a legitimate importance to our collective sustainability as a for-profit enterprise. Come and explore how chemical engineers get safety and profitability done without compromising their virtues or standards.

Chair—Mark Swientoniewski—<u>mswientoniewski@stratag.org</u> Strata G, Knoxville TN

Managing Yourself - Reinventing Yourself for Your Next Role Cosponsored By:

Young Professionals Committee (YPC) (18C)

SYNOPSIS

Oftentimes, a new role signifies a promise of a new future but how often do you take the time to plan out that role to prepare you for your next one. These sessions provide ideas to help you position yourself for your next role. They also teach you how to recognize and articulate your transferable skills.

Chair - Okiemute Sankey - <u>okiemute.sankey@wacker.com</u> Wacker Chemie

Co-Chair—Quinta Nwanosike Warren—Quinta@EngrRC.com Engineering Research Consulting, Houston TX

Managing Continuous Improvement in the Workplace

Cosponsored By:

Technology Transfer & Manufacturing (12C)

SYNOPSIS

Continuous improvement is used in a wide variety of workplaces to continue to look for the best way to manufacture product whether that be a widget, a chemical component, or test methods. This session will look at how different companies are developing their continuous improvement platform, monitoring it, maintaining its importance in the workplace, and even expanding it.

Chair—Donna Bryant—donna.bryant@syngenta.com
Syngenta, Baton Rouge LA

2019AIChE Spring Meeting—Program (Cont') (March 31—April 4, 2019)

Turning an Idea into a Reality: Developing a Company

Cosponsored By:

Young Professionals Committee (YPC) (18C)

SYNOPSIS

From developing your own company to growing your organization, there are many obstacles. This session will talk about all aspects of creating and establishing your own company: idea creation, market validation, incubation, and scaling.

Chair—Daniel Kriozere

Lawrence Livermore National Laboratory, San Francisco CA

Co-Chair—Quinta Nwanosike Warren - Quinta@EngrRC.com

Engineering Research Consulting, Houston TX

Co-Chair—Babak Rafienia—brafienia@amacs.com.

AMACS Process Tower Internals

Lessons Learned from the Industrial Practice of the Open Innovation Model for the Development of New Products

Cosponsored By:

Process Development Division (12)

AMACS Process Tower Internals

SYNOPSIS

Open Innovation is a technology management practice in which external resources are used to supplement a company's internal R&D and commercialization effort. External partnering strategies include licensing in; corporate-funded R&D at universities, institutes and the government; utilizing external providers; and practicing joint developments between companies. This session will examine learnings from both industry and its external partners in innovation.

Chair—Vincent L. Magnotta—vincem1@ptd.net
Retired, Syracuse NY
Co-Chair—Juben Chheda—juben.chheda@shell.com
Shell Projects & Technology
Research Engineer, Process R&D, Houston TX
Co-Chair
Babak Rafienia—brafienia@amacs.com.

Young Professionals in the AIChE Management Division Management Division

Hello all,

My name is Dr. Quinta Warren, P.E. and I am a Director in the Management Division. I joined the Management Division at the end of 2017, and since then I have been helping to bring more members, especially Young Professionals, to the Division.

At the AIChE Spring 2018 Meeting, I chaired a session titled "Managing Yourself: Reinventing Yourself for Your Next Role." The session focused on helping chemical engineers identify their transferable skills and prepare for the role they want to go into next. Because the session was well-received, we plan to have a similar session at the 2018 Fall Meeting which will actually be a workshop. We will walk attendees through auditing their careers, and branding and selling themselves.

I currently work on energy projects at the Millennium Challenge Corporation (MCC) as a AAAS Fellow. MCC is a US government agency that works on international development in developing countries. I also own and run a consulting company called Engineering Research Consulting (www.EngrRC.com) which focuses on energy and water issues. Previously, I was a AAAS Fellow with the US Department of Energy, managing development of modular power generation, and developing technical energy strategies for engaging with other countries. Before that, I worked for ConocoPhillips, researching CO2 capture materials and methods, and optimizing oil and gas production in heavy oil and tight gas reservoirs.

This Fall, I will be chairing a session titled "Chemical Engineers and Policy Making." The session offers a glimpse into what chemical engineers can do in government. This is an often-neglected career path that chemical engineers should consider, especially Young Professionals.

We have some exciting sessions planned for Spring 2019, including Ethical Issues in Safety; Lessons Learned from the Industrial Practice of the Open Innovation Model for the Development of New Products; Managing Continuous Improvement in the Workplace; Turning an Idea into a Reality: Developing a Company; Managing yourself: Reinventing yourself for your next role. The deadline to submit abstracts for Spring 2019 is November 12, 2018 which is approaching quickly. Please submit an abstract soon to make your voice heard.

We in the Management Division are always looking for ways to help our members. If you have any thoughts for things we could do that we are not already addressing, especially for our Young Professionals, please share your suggestions with me or anyone else on the Board. I

can be reached at Quinta@EngrRC.com.

Thank you and hope to see you in Pittsburgh in October.

Quinta



AIChE Management Division 2019 Elections

The end of the year brings the time of elections for officers and board members of the AIChE Management Division. The AIChE Management Division typically holds annual elections in December each year. The positions open for election in 2019 and information about each position are:

Vice Chair, a three year commitment and is expected to serve as Chair in 2020 and becomes Past Chair in 2021,

Secretary, a one year term,

Treasurer, a one year term, and

2 Directors, a three year term.

The AIChE Management Division has several standing committees that need ongoing support during the year. These include Programming, Awards, Nominations, and Newsletter.

Please contact Mark Swientoniewski, <u>mswientoniewski@stratag.org</u> if you are interested in an elected position or helping with a committee for 2019.

Management Division Leadership for 2018

Officers

Chair Fernando J. Aguirre <u>fja@htri.net</u>

Heat Transfer Research, Inc.

Vice Chair Joseph J. Cramer josec@aiche.org

AIChE

Secretary Mahdi Nouri <u>Mahdi Nouri@jacobs.com</u>

Jacobs Consultancy

Treasurer William S. Welker <u>bill.welker@us.nestle.com</u>

Nestlé USA

Past Chair Mark Swientoniewski <u>mswientoniewski@stratag.org</u>

Strata-G LLC

Directors

2016 – 2018 Eldon R. Larsen <u>Larsene@marshall.edu</u>

Marshall University

2018 George W. Newcomb geonewcomb@gmail.com

Newcomb Associates

2017 – 2019 Harold T. Conner, Jr. <u>hconnerjr@aol.com</u>

URS/CH2M Oak Ridge, LLC

2017—2019 Markus E. Scheller <u>scheller54@yahoo.com</u>

Previously with BASF

2018—2020 Quinta Nwanosike-Warren <u>quinta.nwanosike.warren@gmail.com</u>

AAAS/Department of Energy

2018—2020 Brandon Harding <u>brandonaharding@gmail.com</u>

Andeavor

Appointed Positions

Programming Chair Donna Bryant <u>donna.bryant@syngenta.com</u>

Syngenta

Awards Committee Chair George W. Newcomb <u>geonewcomb@gmail.com</u>

Newcomb Associates

Newsletter Editor Joe Porcelli jvpii@jvporcelli.com

JVP International.

Please visit our website below for more information, membership renewals and current offerings.

AICHE Management Division website, http://www.aiche.org/community/sites/divisions/management