

AIChE®

# Management Insight

## Management Division

### Highlights:

- Seeking Programming Vice Chair, for more information contact Joe Cramer at [josec@aiche.org](mailto:josec@aiche.org) or 347-840-0816
- Authors for the next Management Insight Newsletter

## Greetings from the Chair!

As we start to go full swing into 2016, I wanted to recap some of the recent new initiatives coming from Management Division. While it's no secret, joining or starting startups have become the 'in' thing even beyond Northern California, we even see it being reflective in the Journal changing their section B from their 27-year old name "Marketwatch" to "Business and Technology," to highlight more of the intersection of technology and disruption in all industry verticals. Because of this continued interest in startups, Management Division has been developing programming related to entrepreneurship, innovation and startups.

With this niche need, AIChE has created a new community called Center for Innovation and Entrepreneurship Excellence (CIEE). Management Division has and will continue to create great content for CIEE and AIChE at Annual Meetings bringing in thought-leaders, angel investors, private equity and venture capital experts, successful entrepreneurs, and other subject matter experts to talk about topics related to patenting, fundraising, scaling up, and execution. As a part of your Management Division membership, you are also part of the CIEE as we continue to roll out new content and events related to entrepreneurship.

While this programming and content has been well received, Management Division will continue to create more content related to project management, managerial techniques in the workplace, and other traditional topics. Next month is the Spring Annual AIChE meeting in Houston. Some of the sessions Management Division has put together is highlighted in this newsletter along with other Management Division events. If you are coming to the Spring meeting, or even in the Houston area, please try to attend the events. More details will be provided within the Spring AIChE Meeting app found in the iTunes and Google Play store or in the traditional conference information booklets.

In the upcoming year, we look to continue to hear the topics of interest within the institute to create collaborative content with Young Professionals, other AIChE divisions, and committees. We are excited to lead new programs and initiatives within the institute to create a community to help guide or advance your career and networking with other Chemical Engineers working in industry.

We encourage you to contact us if you want to be more involved with the Management Division or send your ideas, content, e-learning, or other related topics and ideas to any of the Management Division officers.

Sincerely,  
Nemoy Rau, Chair

### Inside this issue:

|                                       |   |
|---------------------------------------|---|
| Greetings from the Chair              | 1 |
| Spring AIChE Meeting Program          | 2 |
| Leadership Thoughts                   | 3 |
| From the Programming Committee        | 4 |
| Who are you ?                         | 5 |
| From the Awards Committee             | 5 |
| Your Spot in an entrepreneurial world | 6 |
| Leadership                            | 7 |

## AIChE Annual Spring Meeting Management Division Sessions

---

### Monday, April 11, 2016

**1:30 PM-3:00 PM (#20) An Ethical Afternoon with Allan McDonald**

**3:30 PM-5:00 PM (#52) Important Issues in Professional Development**

3:30 PM (52a) AIChE Young Professionals Committee: The Mentor for Your Professional Development

3:35 PM (52b) Entrepreneurs Guide to Starting a Company

4:05 PM (52c) The Pros, Cons, and Challenges of Consulting

4:35 PM (52d) Sustainability Decisions in a Post COP21 Era

---

*Management Division, Environmental Division, and Chemical Engineering  
and the Law Forum Dinner*

*6:00 PM—10:00 PM*

*Damian's Cucina Italiana*

*3011 Smith St. Houston, TX 77006*

*Tickets (\$55) Available at Registration*

---

### Tuesday, April 12, 2016

**3:30 PM-6:00 PM (#142) SAFE ZONE WORKSHOP & RECEPTION: Making  
AIChE and Our Workplaces Welcoming**

---

*Management Division Committee and Programming Meeting*

*11:00 AM—1:00 PM*

---

## Some Thoughts on Leadership for the Remainder of the Year

I don't like New Years Resolutions. We create them, we share them, and generally by January 20th, they have all but gone in the way-side. Instead, now that spring time is coming we can stop thinking about trying to stick to an exercise routine and look at some leadership resolutions to help transform your company or department for the remaining quarters of this year.

### 1. Make more time for team reflection

Most leaders would agree that the pace of business can be swift in R&D or making quarterly financial metrics. Rarely do teams or leaders have time to reflect on the impact their [or their organization's] decisions made on the company's long-term objectives. For the most part, teams focus on actively addressing more immediate problems, without considering how their solutions might position them to respond to future opportunities.

As a part of your department or group meetings, reflection with your team, including mentees or younger engineers would allow you to better educate everyone about various directions your company could take, long term strategies and decisions to avoid market (or technology) volatility / disruptions. While you will be always putting out "today's fires," make sure you are not busy solving the wrong problem while not hosing down tomorrow.

### 2. Celebrate input as much as outcomes

Many organizations celebrate employees who lead key projects to success or achieve an important objective.

We always seem to miss out on contributions that employees who are creating solutions or the real thought leaders in an organization. When you are having your discussions, celebrate all ideas and contributions to the team that is solving a problem. The 'best' solutions sometimes come from discussions with your team that might have normally failed miserably or gotten off to the wrong direction without these discussions. Failing to acknowledge the input from such employees can increase the risk of losing critical talent that your organization might depend on.

### 3. Hire and Be Passionate

Passionate people can be the life blood of an organization. They believe in the company or their products and can be adamant about serving your customers. They know themselves, believe in themselves and many times, show up as authentic, loyal individuals.

One of your resolutions should be to not only hire passionate people, but BE passionate. Your team looks to you for guidance and as a compass. Showing integrity and passion will rub off on your team and having passionate people around you will help with your goals.

### 4. Develop now for the next decade

With the market volatilities and business cycles, many organizations are cutting costs by slashing training budgets.

As a result, many people need to find talent quickly that have the skills and training needed when they are hired.

Remember that as a leader, it is also important for you to also train and mentor younger talent on strategy, technical training, and your institutional wisdom and expertise. Make them part of the decision-making process to allow them to grow into the next 10 years. These younger engineers will remember where what they learned along the way. Giving them the skills to succeed is key for expanding their career into the future generation of subject matter experts and thought leaders.

As you look at your own leadership, what are the conversations you need to be engaging in? What resolutions could you make that would best serve your company, its culture and its brand? What mistakes have you made this year, and how will you course correct in the coming months? These are the most important questions to ponder as you contemplate the remainder of the year.



## From the Programming Committee

By: Joe Cramer

The Management Division will be presenting just two sessions at the Spring Meeting to be held in Houston from April 10 through the 14<sup>th</sup> but these should be of interest to a broad spectrum of chemical engineers as one session will deal with ethics and the other will touch on a range of issues that should interest many chemical engineers and managers. Another attractive feature will be the scheduling of both sessions in the afternoon of Monday April 11<sup>th</sup>. This will allow Monday attendees to catch the conference Keynote address by Andreas C. Kramvis, Vice Chairman of Honeywell (after an early complimentary continental breakfast—you see, there is a free breakfast) and then take in the Management's afternoon sessions.

The early afternoon session is entitled “An Ethical Afternoon with Allen McDonald”. Allan McDonald was Director of the Space Shuttle Solid Rocket Motor Project at the time of the Challenger accident and later led the redesign of the solid rocket motors as the contractor's Vice President of Engineering for Space Operations. Allan spoke at the 2015 Annual Student Conference in Austin and the message he conveys has importance to all engineers and managers who have or might someday have responsibilities for making critical engineering decisions. Mr. McDonald will also be the speaker for the first day's conference lunch (alas, there is no free lunch). The afternoon session will give attendees another chance to interact with Mr. McDonald and several other speakers or if you can't make the lunch, a chance to hear the story of this disaster and just how it unfolded. He really has a message concerning critical ethical issues that everyone should hear.

The division's late afternoon session on Monday is entitled “Important Issues in Professional Development” which will include papers detailing (1) how to start up a new company presented by recent Ph.D. graduates from Rice who have just recently successfully started up a new high tech company; (2) how to handle the many personal challenges encountered on starting an individual consulting business presented by Jack Hipple and (3) sustainability issues relating to critical developments arising with and after the 2015 Paris Climate Conference presented by a chemical engineer attorney. These are all really current or timeless issues.

The division is also gearing up to present six primarily sponsored sessions in San Francisco in November. These will include a couple of sessions that have been successfully presented in the past on applied project management and innovation, another “Issues” session, a session addressing the question of trends in retractions in the professional literature, a repeat of the “High Performance Teams” session that was well received at the 2015 Spring Meeting in Austin and a session that will explore more comprehensively the “Body of Knowledge of Chemical Engineering” document that was recently adopted by AIChE and try to give chemical engineers insights into how it might be best used. Look for the Call for Papers for this important meeting (the largest annual gathering of chemical engineers and future chemical engineers in the world) to open around February 15<sup>th</sup> and stay open to about May 9<sup>th</sup>.

## Who Are You—Why Does It Matter?

By: Jack Hipple

As a manager, it's more than your SS or employee number. It's how you relate to others, solve problems, and help others solve problems. There are many ways of assessing a manager's "style", the most well-known of which is the Myers Briggs assessment (or one of its competitors measuring the same aspects of behavior). This instrument measures to what degree you are extroverted or introverted, how you prioritize the information you absorb while decision making (an intuitor or sensor---facts and data preference or more gut feel), how you process this information (what is the relative importance of bottom line impact vs. impact on people), and finally your method of closure (fixed "to do" lists with dates and responsibilities or more desire to leave open the door for changes and revisions). This assessment is usually expressed as four letters, such as ESTJ, yielding 16 possible combinations of preferred behavior and these behavior preferences are not equally divided, making things even more interesting when a manager is trying to analyze their own behavior and how they interact with others, especially in a team setting. These behavior preferences also predict very accurately how someone's behavior changes when placed under stress (managers are never under stress are they?), frequently quite different than their normal behavior. This behavior pattern is moderately hard wired, but subtle shifts can occur over time, especially for those on the borderline between two of the preferences.

In addition to relationships, problem solving is another key responsibility. How a manager does this can also be very accurately measured with an assessment known as the Kirton KAI™, which measures problem solving style along a continuum from strongly analogic, or in the box, to strongly unstructured and out of the box. Observed behaviors in these extremes would be someone preferring only "tried and true" solutions within an industry as opposed to linking connections between disparate technologies, someone tied to group conformity vs. actively looking for "out of the box" thinking, or someone enjoying detailed work for extended periods of time vs. someone who is easily bored. This particular behavior is extremely hard wired in us. Someone can "be" a different type of problem solver for a short period of time, but beyond that, significant stress will be seen and felt. It is interesting that individuals with similar social styles do not necessarily compare in problem solving style, setting up potential conflicts in team problem solving when it is assumed that people "get along" in a social setting.

Many individuals are given these types of assessments as part of career or management development, but the amazing and sad thing to me is how little the information is used. Very often, individuals cannot even remember what their assessments were. This is sad as very important information, readily available and attainable, is not used to improve both individual and team performance.

## From the Awards Committee— By: TK Biswas

Joe Cramer, Fernando Aguirre, and George Newcomb volunteered in October to head up a Management Awards Committee. First on the agenda was expanding the committee membership. A recruiting effort resulting in adding five additional members who have a diversity of management experience and global reach. New members are Tarun Biswas, Markus Scheller, Harold Conner, Luis Chamorro, and Neil Yeoman (part-time). George Newcomb is the Chairperson of the committee.

The renewed committee has developed a Charter and 2016 Action Plan. Work is in progress to review and upgrade the Award Definition, Process, and Criteria. Also active are reviews of the Applicant Form and the process to solicit nominations/applications. The committee meets regularly on the first Tuesday of each month at 11:30am EST. Contact George Newcomb (geonewcomb@gmail.com) if you wish to be on the call or would like more information.

**AIChE MANAGEMENT DIVISION AWARD** (sponsored by Dow Chemical) recognizes an outstanding individual who has made a substantial contribution to the Management and Leadership of Engineers involved in the field of Chemical Engineering or to management techniques and procedures utilized in this field. AIChE members are invited to submit their nominations for this year's award on or before May 31, 2016 to George Newcomb by using the nomination form or at <http://www.aiche.org/community/awards/management-division/award>

The selection criteria will be based on demonstrated outstanding accomplishments and achievements that have benefitted both the society and the profession of chemical engineering. The candidate should be a manager in a field utilizing chemical engineering (e.g. Engineering, Design & Construction, Project or Process Development, Manufacturing Operations, R&D, Sales and Marketing, etc.) with membership in AIChE Management Division not required.

The selected recipient will be invited to make a formal presentation at the 2016 AIChE Annual Meeting, will receive a plaque and a \$1,000 honorarium.

## Finding Your Spot in An Entrepreneurial World

Entrepreneurs are prevalent throughout US households, everyone knows one or wants to be one. From billionaires in hoodies to watching people sweat it out and get funded on *Shark Tank*, the term entrepreneur is used loosely to describe them all.

### So how can chemical engineers get in on the action?

Chemical engineering is nestled in the center of new ventures around the world in traditional fields such as mining or refining and emerging technologies in biotech or quantum dots.

#### CIEE - Did you know?

AIChE launched the *Center for Innovation and Entrepreneurship Excellence (CIEE)* in 2014.

CIEE supports the professional development of chemical engineers and other scientists or engineers working with and in scientific, applied, and professional entrepreneurship, innovation and creativity.

The Management Division has co-sponsored many events with the CIEE at our national and Spring Conferences. Including “How to Entrepreneur” and “The Entrepreneurial Chemical Engineer”

Look for news on the upcoming CIEE events at the annual event in San Francisco.

Being an entrepreneur requires a lifestyle commitment, you need to jump in with both feet. When evaluating different opportunities consider the stage of the company. Early stage startups look the least corporate and tend to have the least amount of job security. Later stage startups are more established but still offer entrepreneurial benefits such as employee stock options.

Starting your own company is another option, I founded PreProcess with my business partner after working at an early stage startup.

#### Yo ho, Yo ho - An Entrepreneur's life for me

Being an entrepreneur can be as exciting and gripping as your favorite action adventure movie. Do you have what it takes to make it happen?

First consider your skills. Are you hands on? An excellent communicator? Great with mass and energy balances?

Entrepreneurial roles are faster paced – often requiring results turnaround in hours or days rather than weeks or months. This means you need to efficiently prioritize and use your experience to hone in on the salient points quickly.

"Everyone has ideas. They may be too busy or lack the confidence or technical ability to carry them out. But I want to carry them out. It is a matter of getting up and doing it."

- James Dyson

Startups typically run with fewer people than corporations – you have to be able to dive in and wear many hats. This also means you get to have a much larger impact on the organization.

All for one and one for all – startup teams must have a Musketeer mentality. If one part of the startup does not succeed, the entire venture is at risk of running out of funding.

If all this sounds like a fit for you, get out there and become our world's next great entrepreneur.

*Christina Borgese is a Director of the Management Division and a member of the founding CIEE leadership team. She founded PreProcess, Inc. a company focused on Chemical Engineering for Entrepreneurs™ with a partner after she caught the startup bug.*

### *Officers*

|            |                      |                                 |
|------------|----------------------|---------------------------------|
| Chair      | Nemoy Rau            | nemoyrau@gmail.com              |
| Vice Chair | Mark Swientoniewski  | mark.swientoniewski@cns.doe.gov |
| Secretary  | Frank van Lier       | Frank.vanLier@lubrizol.com      |
| Treasurer  | Bill Welker          | bill.welker@us.nestle.com       |
| Past Chair | Makarand (Raj) Joshi | mgj8@cornell.edu                |

### *Directors*

|             |                       |                             |
|-------------|-----------------------|-----------------------------|
| 2014 – 2016 | Christina Borgese     | christina@preprocessinc.com |
| 2016        | Luis Alberto Chamorro | lchamorrow@serlicorera.com  |
| 2015 – 2017 | Joe Cramer            | josec@aiche.org             |
| 2015 – 2017 | George Newcomb        | geonewcomb@gmail.com        |
| 2016 – 2018 | Eldon Larsen          | larsene@marshall.edu        |
| 2016 – 2018 | Drake Freeman         | drakefreeman@msn.com        |

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

AICHE Management Division website, <http://www.aiche.org/community/divisions-forums/management>