

FLASHPOINT

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<https://www.aiche.org/community/sites/divisions/fuels-and-petrochemicals>

Summer 2018



2018 AIChE Annual Meeting

AIChE + Chemical Engineering: Today, Tomorrow
& Leading the Future

October 28 - November 2, 2018

[David L. Lawrence Convention Center, Pittsburgh, PA](#)

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Chair Corner

Hello F&PD membership,

I hope 2018 and this newsletter finds all our members well.

I'm writing this article on the second of my two recent trips visiting several gas plants in the Permian basin region of Texas. The pace and activity of the energy business here is, putting it mildly, active, and probably more accurately stated, frenzied. Labor & trucking shortages, take-away pipeline constraints, along with continued upstream developments on the production side have helped return the energy industry to a vibrant state, thanks to the significant rebound of crude oil prices since the 2016 bottom from the sub \$30/bbl to near \$70/bbl or more recently. While natural gas prices are still in the \$2.50-\$3.50/MMBTU range, petrochemicals developments in the Gulf Coast and North East are helping on the demand end, along with continued power plant consumption, and even additional LNG and petrochemicals project developments planned.



First, I'd like remind FPD members to take advantage of the new AIChE/F&PD partnership with Gulf Publishing & Hydrocarbon Processing magazine. As part of your \$10 F&PD annual membership, you are entitled to a free subscription to Hydrocarbon Processing – an exclusive, new benefit available only to F&PD members beginning this year. If you are an F&PD member and have either not received an email or missed the first message, please email the AIChE programming team at programming@aiche.org or me at fpdchair@aiche.org. Hydrocarbon Processing magazine is a trusted source of technical information for the energy and fuel and petrochemicals industries.

With this new partnership, F&PD has the option to publish up to 1 submission each month to the magazine. If you are interested in submitting an article on a case study, technology development, or market metrics and trends related to F&PD, please let me at the email address above. All submissions must meet the publishing standards of Gulf Publishing.

As mentioned in our previous newsletters, F&PD and AIChE have been working hard to update our division's website, <https://www.aiche.org/community/sites/divisions/fuels-and-petrochemicals>. Here, we have some specific developments to share. I would first point your attention to the Announcements section of the F&PD website. AIChE and our dedicated F&PD Communications Team are making a real effort to keep this section updated with new information. Please check back here frequently, at least weekly, to check for new information and announcements.

Thanks to our previous chair Ian Glasgow and the work of the AIChE staff, the technical content of the F&PD website has been significantly updated and expanded. To start, ensure you are logged into the AIChE website with your membership credentials. On the F&PD webpage, select Proceedings. Here, you will be able to access the F&PD technical presentations back to 2005 and some of the more recent Ethylene Producers' Conference technical sessions presented during the Spring meeting. The technical information presented in F&PD programming sessions at the Spring and Annual meeting is now at your finger-tips online and included as a benefit of your F&PD membership dues.

Other exclusive and new technical content has also been added to our website under the Technical Content link. A specially curated series of Chemical Engineering Progress (CEP) articles has been added and includes topics on Shale Gas, Gas Utilization, and Distillation & Separations. A compilation of tower operations and troubleshooting papers from CEP, written by Henry Z. Kister, is also included. Take advantage of this additional technical content now available as part of your F&PD membership.

The additional content continues with a set of selected AIChE Webinars, now included at no additional cost as part of your F&PD membership. The Webinars include presentations with both technical and soft-skills subjects such as biofuels, carbon & climate, communication, energy markets, global leadership skills, and more. Be sure to click on the Webinars section under the Technical Content tab on the main F&PD webpage.

Finally, in the Videos section, recent recordings of F&PD- presented papers are available, along with selected ChEnected videos applicable to F&PD.

Please be sure to browse all the new content now included with your F&PD membership. If you have any feedback, please let us know! Please help spread the word about the enhanced technical content and value of your F&PD membership to new potential AIChE and F&PD members.

I'll close with a reminder that the Annual meeting in Pittsburgh is quickly approaching from October 28th-November 2nd, <https://www.aiche.org/conferences/aiche-annual-meeting/2018>. It's also not too soon to be thinking about the 2019 Spring meeting, March 31st to April 4, 2019, <https://www.aiche.org/conferences/aiche-spring-meeting-and-global-congress-on-process-safety/2019>.

Please see the line-up of the F&PD technical programming topics at both conferences online.

For the Annual meeting in Pittsburgh, there are a couple of opportunities for F&PD members to help with the activities of the Division. For years, F&PD has participated in the Annual Student Conference, helping to share information about our industry to the next generation of chemical engineers. This year, F&PD is presenting an industry overview "Refining and Gas Processing 101- An Introduction for New Graduates" on Saturday October 27th at 11:45 a.m. If you would like to share your expertise and experience with the next generation, please let me know. F&PD also sponsors the Harry West Award that recognizes outstanding undergraduate research projects presented at the Undergraduate Student Poster Session on Monday morning October 29th at the conference. If you would like to help judge the posters in the F&PD category, we welcome the help! Plus, it's another great way for F&PD members to meet future engineers and potential F&PD members!

Sincerely,

Bill C. Rooney, Ph.D.

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BELONG TO SOMETHING

BIGGER

AIChE The Global Home of Chemical Engineers



Bigger ideas. Bigger networks. Bigger paths to career advancement.

AIChE® membership means access to bigger ideas, bigger networks, and bigger opportunities for career advancement and enhancement. To grow this community, we are offering an exclusive membership offer specifically-designed for Chemical Engineers working within Fuels & Petrochemicals.

Become an AIChE member and join our **Fuels & Petrochemicals Division** to immediately access these **benefits valued at over \$7,000 for the price of \$209.**

- * Download **17 Fuels & Petrochemicals Division Conference Recordings (2013-2017) & Proceedings (2006-2017)**, valued at \$2,635. Get access to new F&PD conference proceedings each year with continued membership. More to come in the near future!
- * Downloadable curated **Fuels & Petrochemicals CEP magazine article** bundles featuring 26 articles, valued at \$780.
- * Receive a subscription to **Hydrocarbon Processing**, valued at \$399.
- * Access to **8 Fuels & Petrochemicals Division Webinar Bundles**, valued at \$3,192. Want more? AIChE members receive 6 free annual credits to apply to purchasing live and archived webinars and conference presentations.
- * Receive a subscription to **CEP magazine**, an invaluable resource for engineers. Like to read on the go? Access the latest issues on the new **CEP Mobile App**, for members only.

Belong to AIChE and the **Fuels & Petrochemicals Division.**

Join at **www.aiche.org/JoinFPD**

Congratulations to F&PD Award Winners

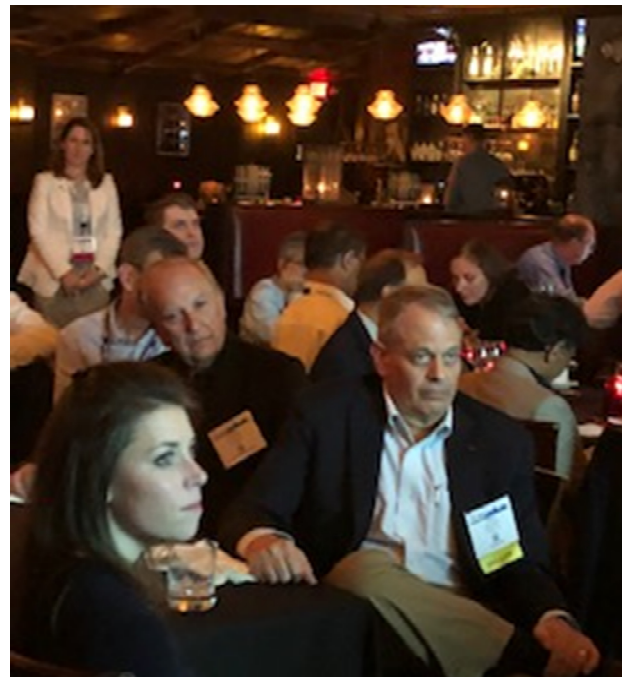
AIChE Spring Meeting, Orlando 2018

The Fuels and Petrochemicals Division held their Monday night Award Dinner at Itta Bene! in Orlando. Over 60 F&PD members and guests attended the dinner to network with their peers, enjoy some great food and drink and hear the F&PD Award Presentation by **Jennifer Holmgren, CEO of LanzaTech**. In addition to F&PD members, Christine Seymour, AIChE President and many AIChE staff members also attended the dinner. After an hour of cocktails and networking, all enjoyed an amazing buffet dinner, followed by presentation of the awards. All outgoing F&PD officers and directors received plaques, and incoming chair, Bill Rooney of UOP gave an update on his plans for the coming year.

Rick Isherwood, winner of the F&PD Service award was also given his award for many years of service to the Division. Then Jennifer was given her award, and gave an informative and interesting presentation entitled “No Carbon Left Behind” on the work of LanzaTech and other ways to keep carbon out of the atmosphere. The presentation was very well received with many questions following the presentation. Everyone in attendance had a great time at the event.

In addition to the award dinner, F&PD started a new tradition this year with the Sunday Night Volunteer Reception and Long Range Planning Dinner. This event was held at Bahama Breeze, where invited volunteers gathered to network and share their long range ideas for the Division. The event was very successful, so the plan is to continue this event again at next years Spring Meeting. A number of excellent ideas were generated which will be evaluated and implemented over the next year and beyond. Want to participate? Get involved in F&PD as a volunteer so you too can have input on the future of the Division.





F&PD Nominee Requests from the Past Chair

As the Past Chair, I have the honor to lead the division effort to select the winner of the two division awards that is provided to those who have made contributions to the fuels and petrochemical industries and to the division as volunteers. These are the F&PD Award and Distinguished Service Award. F&PD also needs nominees for the new incoming leadership that will be voted on in the election that will occur before next year's Spring Meeting that will be in New Orleans.

The F&PD Award recognizes individuals who have made substantial technological contributions to the advancement of the fuels and petrochemicals industries. The selection criteria is based on a long and recognized record in the nominee's areas of achievement. The selection committee also looks at the impact of the nominee combined contribution in the areas of technical achievement, management skills, business acumen, academic leadership, and general service to the profession.

The F&PD Distinguished Service Award recognizes an individual's outstanding service specifically to F&PD. The candidate must have participated extensively in a variety of division activities demonstrating leadership, and have served the division a minimum of five years.

AIChE administers more than 60 additional awards to recognize key contributors to the overall profession of Chemical Engineering. As a result, we encourage all F&PD members to feel free to recognize and nominate worthy F&PD members to all the various AIChE institute awards which are located at <https://www.aiche.org/community/awards>.

I also request that all F&PD members feel free to provide nominations for those who should be considered to become ExCom members. Each year we need nominations for the 2nd Vice Chair (who will eventually become the F&PD Chair), Treasurer, and Directors. The election committee looks not only to those that have shown leadership in Programming, but also leadership in other F&PD activities (outreach, communications, etc.).

Please send all award and ExCom nominations to the Fuels & Petrochemicals Division Past Chair at fpdpastchair@aiche.org

Ian Glasgow

F&PD Past Chair

Process Technologist, IAG

News: AIChE Chicago Section

The Chicago section recently closed out our programming year with our May meeting. Stan Carp from UOP gave an interesting, and topical, presentation on Refining and Petrochemical market trends. In addition, the section presented the 2017 Ernest W. Thiele Award to Doug Naifs of UOP. Doug was honored for his significant innovation and development in refining and petrochemical process research in the field of chemical engineering. Doug also has dedicated himself to mentoring younger engineering and promoting STEM with students through the program "You be the Chemist" that has blossomed into 37 states' activities for middle and high school students.

We are looking forward to an exciting 2018-2019! One initiative for the coming year will be to promote collaboration with national divisions such as F&PD. Please let me know if you have any ideas! mike@ptisolns.com

Mike Schulz

AIChE Chicago Section Chair

The Fuels and Petrochemicals Division Collegiate Academic Scholarship for Chemical Engineering Majors.

The Fuels and Petrochemicals Division of AIChE (F&PD) is planning to sponsor up to two \$1,000 one-time awards to exemplary undergraduate students majoring in Chemical Engineering from an ABET accredited college in 2018. F&PD is committed to introducing undergraduate students to careers in Fuels & Petrochemicals through its programs, helping to fuel the industry's need for top talent in the future. This is a new effort on part of F&PD and complements our existing high school scholarship program that is typically run during the Spring semester.

While some of the details of the program are still being finalized and not yet ready as we went to press with this issue, please stay tuned. We will have further announcements soon posted to our website. We plan to roll this out for the Fall Semester starting this year. <https://www.aiche.org/community/sites/divisions/fuels-and-petrochemicals>

If you do have any questions or have interest in volunteering to help run this program of F&PD, please contact our Scholarship Coordinator, Professor Sheima Khatib, at fpduniv-scholar@aiiche.org or the F&PD chair at fpdchair@aiiche.org. Once the details are posted to our website, we kindly ask F&PD members to help spread the word on this new program.

10th AIChE Southwest Process Technology Conference

Save the date

AIChE's Southwest Process Technology Conference (SPTC) is entering its 10th year in 2018. SPTC annually attracts over 400 attendees and established a good reputation as a go-to regional conference in the Gulf Coast area in content and value. This year SPTC will be held on Tuesday and Wednesday October 9 and 10 at the Moody Gardens in Galveston, TX.

SPTC has continually worked to keep up with the changing industry dynamics and align topics that reflects the market trends. This will be reflected in the keynote presentations at this year's conference. The opening keynote on Tuesday, October 9 will be the "2018 Outlook for Energy: A View to 2040" by Tahmid Mizan, Manager of Global Regulatory Affairs - Fuels & Lubricants at ExxonMobil. There will also be a keynote Executive Panel on Wednesday, October 10 that will be on the topic on "Artificial Intelligence (AI) and the Impacts to Chemical Engineering. The program is still in the planning phases and is scheduled to have around 40 presentations over 2 days. The conference also carries an Exhibition Hall which provides a solid platform to showcase various technology and service provider offerings, and is a networking opportunity to the conference attendees.

The conference will continue to feature a Student Program for undergraduate and graduate students in the Gulf Coast region where they can hear from practicing chemical engineers discuss their industry experience. The SPTC also will include a joint Exhibition Expo and "Meet the Industry" poster reception that will provide networking opportunities for our professional attendees, and opportunities for our graduate student attendees to share their research to industry attendees who will be able to serve as reviewers, mentors, and talent scouts.

SPTC Leadership Team and Programming Committee has been working hard over the past few months to ensure that this conference is yet another success. The conference website is: www.aiche.org/sptc which will be updated as more details become available around the technical program. Any questions can be emailed to the Leadership team at sptc18@aiiche.org. Registration will be underway soon. We look forward to seeing you there!

Ian Glasgow
F&PD Past Chair
Process Technologist, IAG

F&PD Sessions @ 2018 AIChE Annual Meeting, Pittsburg

There are fifteen F&PD-sponsored/co-sponsored sessions at the 2018 Annual Meeting. It includes four plenary sessions co-sponsored with other areas, one F&PD poster session (27 posters), and ten topic sessions (68 oral presentations). Among the four plenary sessions, the one on "PI Topic Conference Plenary: A Look Inside the RAPID Manufacturing Institute" may be of special interest to us since the invited speakers will be presenting the couple dozen process intensification (PI) projects being actively pursued at the AIChE RAPID Institute. These projects mainly focus on PI opportunities in natural gas, petrochemicals, and biofuels. Among the topic sessions, two new topics are introduced this year to broaden the technical scope of the division program: 1) Refining and Petrochemical Plant Modeling and Operations Improvement (12 oral presentations), and 2) Electrochemical Reactors, Fuel Cells and Electrolyzers (10 oral presentations). Both topics have attracted contributions from the industry and the national laboratories.

A brief schedule of these fifteen F&PD sessions is given below. Please do join us in Pittsburgh.

o MONDAY, OCTOBER 29, 2018

11:00 AM - 12:30 PM

[120 The Future of Energy in the Region, Nation and World \(Invited Talks\)](#)

12:30 PM - 03:00 PM

[142 Developments in Petroleum and Biofuels Refining Technologies](#)

03:30 PM - 06:00 PM

[215 Developments in Unconventional: Shale Gas, LNG, CNG, and LPG](#)

[236 Plenary Session: Process Intensification](#)

o TUESDAY, OCTOBER 30, 2018

08:00 AM - 10:30 AM

[300 Refining and Petrochemical Plant Modelling and Operations Improvements I](#)

11:00 AM - 01:30 PM

[311 What the Heck Happened? Past, Present & Future Disruptions to the Chemical/Fuels Business \(Invited Talks\)](#)

o **TUESDAY, OCTOBER 30, 2018**

12:30 PM - 03:00 PM

[362 Refining and Petrochemical Plant Modelling and Operations Improvements II](#)

03:30 PM - 06:00 PM

[384 AIChE's 110 Year Celebration \(Invited Talks\)](#)

[390 Conceptual Process Design in Refining, Petrochemicals and Gas Processing](#)

o **WEDNESDAY, OCTOBER 31, 2018**

08:00 AM - 10:30 AM

[453 Electrochemical Reactors, Fuel Cells, and Electrolyzers I](#)

12:30 PM - 03:00 PM

[511 Electrochemical Reactors, Fuel Cells, and Electrolyzers II](#)

03:30 PM - 05:00 PM

[546 Poster Session: Fuels and Petrochemicals Division](#)

o **THURSDAY, NOVEMBER 01, 2018**

08:00 AM - 10:30 AM

[599 Alternative Fuels and Enabling Technologies I](#)

12:30 PM - 03:00 PM

[644 Alternative Fuels and Enabling Technology II](#)

03:30 PM - 06:00 PM

[693 Catalytic Biomass Conversion to Chemicals](#)

By: Chau-Chyun

Congratulation to F&PD Fellows

Gregory E. Yeo

Greg Yeo is Chief Engineer at ExxonMobil Chemical Company, located in Baytown Texas. He is a graduate of Worcester Polytechnic Institute with a BS & MS in Chemical Engineering, joining Exxon Chemical in 1979. Greg's early career included a wide range of technology, technical and manufacturing roles in the olefins business. Since then, he has led development teams for ExxonMobil Chemical's major ventures in North America, Europe, the Middle East and Asia.

Greg is a member of the Fuels & Petrochemicals Division and serves in several AIChE leadership positions including the Executive Board of the Programming Committee and the Ethylene Producers' Committee.



Mr Clifford Kowall, PE

Cliff is Senior Technical Fellow at The Lubrizol Corporation.

He is a graduate of Perdue University with a B.S in Chemical Engineering and MS in Chemical Engineering from North Carolina State University and MS in Business from John Carroll University.

He is a member of AIChE Catalysis & Reaction Engineering Division, Cleveland Local Section, Fuels & Petrochemical Division, North America Mixing Forum and Process Development Division.



F&PD Officers Contact Information

POSITION	ALIASES ADDRESS	Name
Chair	fpdchair@aiche.org	Bill Rooney
1 st Vice Chair	fpd1vchair@aiche.org	Saadet Ulas Ackigoz
2 nd Vice Chair	fpd2vchair@aiche.org	Ahmed Khogeer
Past Chair	fpdpastchair@aiche.org	Ian Glasglow
Secretary	fpdsec@aiche.org	Clayton Sadler
Treasurer	fpdtreasurer@aiche.org	Lori McDowell
Communications Director	fpdcommmdir@aiche.org	Ellen Arnold (Kloppenborg)
Webmaster	fpdweb@aiche.org	Abyar Aeja
Newsletter Editor	fpdnewsletter@aiche.org	Azita Ahmadzadeh
Director – YP Liaison	fpdypliaison@aiche.org	Sharon Maydack
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