



Industrial & Engineering Chemistry

Making Chemistry Work!

2017 Summer Newsletter

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SST Subdivision Past Chair: Peter Zalupski

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Chair's Report

I hope the first half of 2017 has been a good one professionally for every member of the division. For me, 2017 has brought or is bringing significant changes. I retired two months ago and as I write this I am in the midst of moving from my home of 24 years to a new home in a different state about 400 miles away. Obviously, these changes have necessitated a lot of planning and reflections. These events have reminded me of a couple of quotes about change. The first quote from Benjamin Franklin is "When you're finished changing, you're finished". Jack Welch once said, "Change before you have to". Changes can be very unsettling especially if you are not in control of the change. This can happen by an unexpected reorganization at your company or institution or changes in funding agencies, both of which have happened several times in my professional career. It is always much more pleasant when one is controlling the change. The division has been active in making changes to fulfill the goals from our strategic planning retreat in 2016. Please do not hesitate to let me or another officer know of any suggestions or ideas that you have that would increase the value of divisional membership.



David Hobbs
I&EC Chair

Speaking of changes, Melanie Moser has decided not to run for reelection this year. She has served the division as a Councilor for many years. On behalf of the division I thank Melanie for her outstanding service in this capacity. I refuse to say goodbye as I am sure that she will continue to participate in the division in other ways.

The Spring 2018 Meeting in New Orleans has a large number of confirmed symposia as listed below.

- I&EC Fellow – Yong Wang (Jean-Sabin McEwan & Jamie Holliday)
- I&EC Fellow, ACTP – Dave Mackowiack (Christopher Nicholas)
- ACS Symposium Award for International Fellow – Shahidah Mohd Shariff (Azlan Shah Hussain)
- I&EC Early Career Fellow – Beata Kilos (Eranda Nikolla)
- Separation Science & Technology in Medical Cannabis & Hemp Industry (Jerry King)
- Inaugural Joint Symposium of Separation Science Subdivisions (Glenn Fugate & Catherine Rimmer)
- Water Purification for a Sustainable Future (Shannon Mahurin & Geoffrey Geise)

- Down the Pipe: Translating Basic Science to Industrial Applications (Joseph Falkowski)
- Industrial Research of Chemists Local to the Gulf Region (Joe Saviano)
- Over Four Decades of Catalysis and Nanoparticle Commercialization: Kenneth Klabunde Memorial Symposium (Ryan Richards)

We continue to seek out and fund innovative ways to provide technical programs at national as well as regional meetings. Please contact our Program Chair, Carter Abney, if you have suggestions and interest in organizing a symposium.

Looking forward to seeing you in Washington, DC next month.

Communication Committee

I&EC Division will create a promotional video as part of a recent ACS initiative to convey the benefits of joining the division through storytelling. The division selected me as the Communication Committee's Chair to be the spokesperson. On the video, I will talk about what motivated me to join the division and why other ACS members should also consider joining IEC.

In 2016, through a division acquisition initiative, ACS was able to produce 13 testimonial-style videos promoting division membership. In 2017, ACS will give the 19 additional Technical Divisions the opportunity to create promotional videos.

We would be able to use the video on IEC website, in recruitment e-mail messages, on social media and on YouTube for search engine optimization (SEO) to drive traffic to IEC sites. The current videos are being promoted across ACS media channels and are all hosted on the ACS YouTube on the [Technical Divisions playlist](#).

As the spokesperson, I have blocked a 30-minute appointment while in Washington, DC for the ACS National Meeting to record the actual promotional video with professional equipment and staff. Once the video has been filmed and finalized, we will be posting it on our social media pages and Division website.



Samina Azad
Communications
Chair

I&EC Councilor

I would like to thank the members of the I&EC division for many years of support, by electing me to many offices. But I have decided not to run for re-election to Council. I have been active in the I&EC division since 1979 and a councilor since 1993. I have served I&EC by participating in programming, attending meetings and functions both of the division and of the Society and by representing the division interests at Society meetings. I have worked to keep the I&EC in the ACS spotlight as much as I could, and brought information back to I&EC officers to facilitate the ongoing operations of the division in its capacity as a unit of the ACS. The time has come for me to step aside and give this leadership opportunity to someone new.

I am currently a full member and vice-chair of the ACS Membership Affairs Committee (MAC, 2014-2017, associate member 2013). As such I will be participating in a strategic planning meeting for MAC just before the fall national ACS meeting in Washington, DC this August. Like many of the ACS Council committees MAC holds its regular business meetings on the Sunday of the national meeting, and I will there. I hope that you will continue to support your councilors in their service to the Society as a whole, because it keeps us from doing some division activities, and makes us a bit less visible to you.

Councilors are representatives of their local section or division, but they are officers of the ACS. Throughout my long service to ACS I have been on many of the council committees and I have learned a lot about the Society and its members. I know that all of us are committed to chemistry, trying to help people appreciate its importance in their lives and our society in general, and to the future chemistry professionals who will follow us. I am not retiring from my full time job, teaching organic chemistry and being an administrator on my campus, so I stand ready to give advice and help however I can, whomever takes my



Melanie Moser
I&EC Councilor

position. I&EC division will always be special to me, and again I would like to thank you all for your confidence in me throughout the years.

I&EC Councilor

As the chair of Multidisciplinary Program Planning Group (MPPG) this year, I have been working to increase Division involvement in the planning of our national meetings. And, given our continued interest in promoting the interests of our industrial members, looking to create content that is more valuable to their needs. A new theme meeting programming guide is being developed and structures are being created to increase communication between Divisions and theme organizers. Since the theme programming is developed 2 – 3 years in advance, this isn't likely to be seen by members immediately, but changes are forthcoming that should increase the alignment of divisional programming with the theme, creating new opportunities for our I&EC members to integrate with broader ACS programming.



Martin Abraham
I&EC Councilor

I also serve as a member of the Divisional Activities Committee (DAC). It has been an interesting year, as we have had two proposals for new programming divisions. I&EC has weighed in on both of these proposals and is generally neutral on the idea. While the divisional topics have merit (space in one case, materials in the other), there are significant questions as to whether new divisions will improve meeting programming. Personally, I am opposed to the creation of new divisions, because 1) the programming is already ongoing within the content of existing divisions, and 2) divisions are struggling to attract and retain members. So while I understand the goals of those suggesting new divisions are needed, I believe that a reduction in the number of divisions, rather than an increase, would be in the best interest of ACS overall.

I welcome your input into any of these ideas, and appreciate the opportunity to continue to serve as your Councilor.

Treasurer's Report

Excluding any unexpected charges from the San Francisco billings (billings have not yet been received), the I&EC financial outlook for 2017 is that we will come in on budget for expenses, and slightly unfavorable on income. Expected growth from our investments will result in a net positive position for the year.

Travel expenses and meeting expenses have continued to increase annually (due to rising costs), while our major sources of income: dues & allocation, have declined in the last few years. This mandates expense control, and the executive committee has worked hard to keep the travel budgets under control. At the same time, the board needs to look for new avenues of revenue so that we can continue to offer the level of programming and services to our membership, and even expand certain areas.



Janet Smith
I&EC Treasurer

Report from the Separation Science and Technology (SS&T) Subdivision

As the Fall meeting approaches, we would like to remind you of an impressive symposium on "Structural & Supramolecular Aspects of Metal Ion Separations". Join Carter Abney (ORNL) and prominent speakers from around the globe for three half-day sessions (Monday afternoon and all-day Tuesday) that will feature developments and insights in solvent extraction, adsorption, ion exchange, and the characterization of interfacial chemistry.

Looking forward to the Spring 2018 meeting in New Orleans, the SS&T programming committee has been working on two new collaborative symposia. A joint program between the Subdivision of Chromatography and Separations of the Analytical Division and SS&T presents the "Inaugural Joint Symposium of the Separation Science Subdivisions". Led by Glenn Fugate (I&EC, ORNL) and Catherine Rimmer (ANYL, NIST), this symposium is the first in a series to



Corey Hawkins
SS&T Chair

be co-sponsored by ANYL and I&EC. It is designed to highlight our overlapping interests in separations and facilitate synergy among scientists and engineers across many fields. Areas of interest are broadly defined and include themes such as methods development, separation compounds and systems, laboratory and industrial systems instruments and hardware, and industrial separations needs and development. Travel awards may be available for symposium participants. Contact Glenn Fugate (fugatega@ornl.gov) for more information.

A collaboration with the Cannabis Chemistry Subdivision of CHAS has been fostered by Jerry King (U. Arkansas), who is co-organizing a symposium with Ezra Pryor (CANN, Heidolph Instruments), titled "Separation Science & Technology in the Medical Cannabis and Hemp Industry". Talks and discussions will align with the theme of processing and scale-up of separation technology applied to the cannabis-hemp industry. Travel awards may be available for symposium participants. Contact Jerry King (add email) for more information.

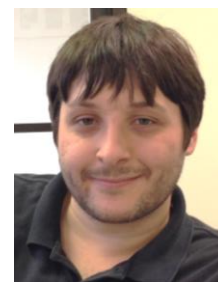
Report from the Applied Chemical Technology (ACT) Subdivision

Hello I&EC Membership,

My name is Joe Saviano and I hold the Chair position within I&EC's ACT Subdivision. I am a formulation chemist at Biosolutions LLC based in Grand Haven Michigan. I am excited to work with ACTS as it provides a unique opportunity to bridge the gap between Academia and Industry.

My goal is to help promote industry based programing in a way that industrial associates can benefit without having the expense of the ACS national Meetings. This will allow I&EC to provide its membership with Insight, professional development and networking opportunities that will benefit the industrial chemical enterprise.

To do this we will be hosting a program titled *Industrial Research of Chemists Local to the Gulf Region*. This symposia will focus on non-Ph.D chemists and their research contributions to the local chemical industry. We are currently looking for Industry speakers for this event. If anyone is interested or knows someone that would like to speak please reach out.



Joe Saviano
ACT Chair

I&EC Symposia at the Spring National ACS Meeting in San Francisco (August 20-24, 2017)

I&EC Division Events Schedule Outline

Saturday, August 19

Subdivision Meetings @ Grand Hyatt Washington, Ballroom C

ACT: 10:00 AM-11:00 AM

NCIA 11:00-12:00 PM

SS&T: 12:00-1:00 PM

Division Meetings @ Grand Hyatt Washington, Ballroom C

Programing Committee: 1:00-2:00 PM

Steering Committee Meeting: 2:00-3:00 PM

Sunday, August 20

1:30 PM - 5:30 PM I&EC: A - Structure Based Approaches to Ion Separations (I) -Oral (Technical Program) @ Grand Hyatt Washington, Declaration AB

7:00 PM – 10:00 PM I&EC Executive Committee Meeting @ District ChopHouse & Brewery, 509 7th St. NW #1, Washington, DC 20004

Monday, August 21

8:00 AM - 12:00 PM I&EC: A - Structure Based Approaches to Ion Separations (II) – Oral (Technical Program), Grand Hyatt Washington, Declaration AB

1:30 PM - 5:30 PM I&EC: A - Structure Based Approaches to Ion Separations (III) – Oral (Technical Program), Grand Hyatt Washington, Declaration AB

8:00 PM – 10:00 PM Sci-Mix (Technical Program) – Washington Convention Center, Halls D/E

Note: I&EC Division has a table reserved during the Sci-Mix for recruitment and networking purposes

Tuesday, August 22

- 8:00 AM - 11:40 AM I&EC: A – General (I) – Oral (Technical Program), Grand Hyatt Washington, Constitution Ballroom C
- 1:30 PM - 5:10 PM I&EC: A – General (II) – Oral (Technical Program), Grand Hyatt Washington, Constitution Ballroom C
- 6:00 PM – 8:00 PM I&EC: A – General (I) – Posters (Technical Program) – Washington Convention Center, Hall D

Wednesday, August 23

- 9:00 AM - 11:45 AM I&EC: A – General (III) – Oral (Technical Program), Grand Hyatt Washington, Constitution Ballroom C

I&EC Councilor**2017 Fellows honored with symposia in San Francisco:**

- Prof. Klavs Jensen, Warren K. Lewis Professor of Chemical Engineering at the Massachusetts Institute of Technology, I&EC Division Fellow
- Dr. Leigh Martin, Distinguished Staff Scientist at the Idaho National Laboratory (currently at the Oak Ridge National Laboratory), I&EC Division Early Career Fellow
- Dr. Kew-Ho Lee, President of the Korea Research Institute of Chemical Technology, I&EC Division International Fellow
- Ms. Michelle Cummings, Associate Research Development Specialist, Electronics and Lighting, at the Dow Corning Corporation, I&EC Division Applied Chemical Technologist (ACT) Fellow

2018 Fellows to be honored with symposia at the upcoming Spring meeting in New Orleans:

- Dr Yong Wang, Laboratory Fellow and Associate Director of the Institute for Integrated Catalysis at Pacific Northwest National Laboratory and Voiland Distinguished Professor in Chemical Engineering at Washington State University, was selected as the I&EC Division Fellow
- Dr. Beata Kilos, Associate Research Scientist in the Inorganic Materials and Heterogeneous Catalysis Group of the Dow Chemical Company, was selected as the I&EC Division Early Career Fellow
- Dr. Shahidah M Shariff, Head of Group Research and PETRONAS Research Chief Executive Officer, was selected as the I&EC Division International Fellow
- Mr. David Mackowiak, Lead Engineer/Scientist in the Proof of Concept lab at Honeywell UOP, was selected as the I&EC Division Applied Chemical Technologist (ACT) Fellow

Call for nominations now open for 2019 awardees: deadline is Nov. 30 2017. Look for the reminder notification being sent by Dr. Samina Azad.

Call for Papers**Separation Science and Technology in the Medical Cannabis and Hemp Industry**

255th National Meeting of the American Chemical Society, New Orleans, Louisiana, March 18-22, 2018

Co-Sponsored by the Separation Science and Technology Subdivision –IEC Division and Cannabis Chemistry Sub-Division – CHAS Division

Abstracts are invited in the application of separation techniques and processes for this co-sponsored session – particularly papers focused on post- and pre-extraction techniques/processes as well as scale-up for cannabis/hemp processing. Applicable processes include distillation for concentration and solvent removal, phase separation (i.e. de-waxing), adsorption, chromatography (SFC), as well formulation of extract delivery systems (infusion), as well related topics such as automation, module mobility, and requisite physicochemical data.

Abstracts are due by October 16, 2017. Abstracts are to be submitted using the Meeting Abstract Programming System (MAPS) at www.acs.org.

Organized by:

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