



# WIC

WOMEN IN CHEMICAL ENGINEERING  
An AIChE Community

## NEWSLETTER

ISSUE 10  
SPRING 2020



Welcome to 2020's Spring e-newsletter of the Women In Chemical Engineering (WIC), an AIChE community. We have exciting events coming up at the 2020 AIChE Annual Meeting. You will also find information about our past events held at the 2019 AIChE Fall Meeting. Enjoy!



### *Inside this issue..*

- Message from the Chair
- Message from the Treasurer
- How to Get Involved with WIC
- 2019 AIChE Fall Meeting Recap
- Our Mission
- Meet our 2020 WIC Executive Committee



### *Upcoming events...*

MAC Networking Session: August 18th (4:00 PM CST)

Unconscious Bias: Why it Matters in STEM and Engineering: August 19th (11:00 PM CST)

WIC Networking: August 19th (4:00 PM CST)

WIC Keynote by Camille Bastille: August 20th (3:00 PM CST)

Rising Star Leadership Development Workshop for Women: September 22th (10:00 AM CST)

# Message from the Chair

Dear WIC Community,

*I don't know about you, but for me 2020 has been a year like no other. It started with a pandemic that led to a rapid move to remote/on-line learning for those of us in academics and work from home for others. At the same time, K-12 schools were closing and our kids were sent home with the expectation that learning would continue. In many cases, childcare centers closed and we were left without the childcare we need to focus on our careers. For my family, this meant our two career household shifted to just one for three months. It appears that many of us will continue to work from home for the remainder of 2020 and work-related travel will be limited by our employers.*

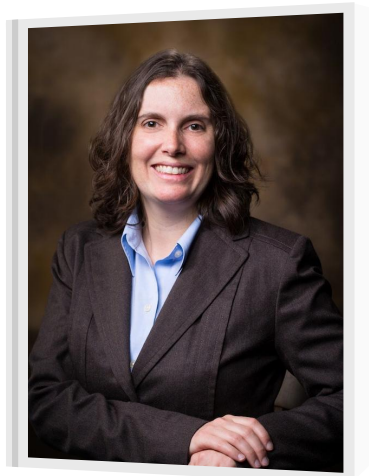
*Then in May we learned about the death of Ahmaud Arbery, who was jogging when he was murdered by racists. We learned about the death of Breonna Taylor at the hands of police and witnessed George Floyd cry "I Can't Breathe." People took to the streets to protest police brutality and systematic racism. Black people are sharing their stories in the streets and on social media. Our colleagues spoke out using hashtags like #BlackintheIvory on Twitter. WIC is listening. We believe that Black Lives Matter and are committed to providing a space for the voices of Black women. Our first steps in advocating for inclusion and justice will be:*

*1) ensuring that WIC luncheons and workshops bring diverse perspectives and intentionally invite Black women and allies, 2) dedicating travel grants for Black graduate students to attend the annual meeting, and 3) working with AIChE to promote cultural competency training. We welcome your stories, suggestions and further dialogue to address these issues. Don't hesitate to reach out.*

*To our Black colleagues, we see you, we hear you, we stand with you, and we are committed to being better.*



Shannon L. Servoss  
Associate Professor  
Ralph E. Martin Department of Chemical  
Engineering  
University of Arkansas



Connect  
with us!

Please join our email list and social media groups. We are hoping to create networks between women undergraduates, graduate students, post-docs, industry professionals, and academics. Please feel free to start discussions and post relevant articles.



<http://www.aiche.org/community/sites/committees/womens-initiatives/forms/keep-posted-on-wic-activities>



<http://www.linkedin.com/groups/AIChE-Womens-Initiatives-Committee-4823836>



<https://www.facebook.com/groups/aichewic/>



<https://twitter.com/aichewic>

# Message from the Treasurer

## *Ups and Downs*

If you're like me, the past two months have been very up and down. Even though for some of us, our lived experience may have included quite a few challenges, for many of us, this is about as upended as we may have ever felt. Some of us have been directly affected by COVID-19, either ourselves or family and friends falling ill. For the rest of us, story after story in the media has reflected the unequal impact of this pandemic. National and global unrest following the death of George Floyd in Minneapolis, MN on May 25th, 2020, has also brought systemic racism into the foreground.

This newsletter has information about WIC programming to be thinking of as we make our way through these next uncertain months. Networking and professional development at the same time are always great, and I hope that you will be able to join in!

Outside of WIC programming, I would urge everyone to be sensitive to your own ups and downs. Women are disproportionately impacted, from layoffs, to struggles with work family balance at home, increased domestic violence, and more. There's lots of great advice in the media about self care, but I would urge you to also connect in with your own networks when you can, and to ask for support also if you need it. I know many of my friends in the academy are working to figure out how to keep students engaged in remote instruction, and also some are trying to help students navigate their own pandemic related challenges unrelated to school. Professional track (un-tenured) faculty may be concerned about job security. I know many friends in industry are either working flat out to figure out how to maintain business continuity, or develop pandemic solutions, or are up late at night worried about layoffs, or if furloughed or laid off, worried about how to make ends meet.

As an example, in my own role as an academic administrator, the last three weeks, I have received many requests for uplifting or inspirational videos (one just came in as I was writing this article!). I'm not a fan of making videos of myself even under normal circumstances, and some days I'm flat out of 'uplift'. Not a great day to make a video. But other days I feel better, so I save the videos for those days and I also reach out to colleagues that I think might be struggling both at my institution and elsewhere. Checking in with other people in my similar role, I know that some of them are struggling with these uplifting videos too, which is somehow comforting.

Our circumstances are draining; there's no way around it. If you've got a little extra 'uplift', please share it out. If you need someone to talk to, please don't hesitate to ask someone. If you are asked, and it's not a good day - schedule it for a different day. If you need more than just a good talk with a friend, be sure to take advantage of your company or academic institution's employee assistance programs. For more acute circumstances, the National Domestic Violence Hotline (1-800-799-7233 or text LOVEIS to 22522) and webpage [thehotline.org](http://thehotline.org), and the National Suicide Prevention Lifeline (1-800 273-8255[TALK]) with a list of additional resources at: [SpeakingOfSuicide.com/resources](http://SpeakingOfSuicide.com/resources) are available 24/7. We are all here together in these times, and even though 'here' means something different now, the 'together' part still holds.

Sheryl Ehrman  
Dean of Engineering  
San Jose State University



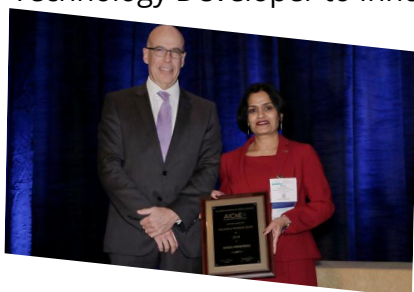
# 2019 AIChE Annual Meeting Recap



It was great to meet you all at our social events in Orlando! Thank you all who attended our luncheon, workshops, panels and who stopped by to meet and greet us! [#WomenInChemE](#)

## Awards

**Dr. Cristina Thomas** received the AIChE Industry Leadership Institute Award. She was recognized for her leadership pioneering computational materials modeling in industry to launch innovative products, and for her steadfast support building bridges with national laboratories and academia. Dr. Thomas has also been selected as the 2019 Management Award recipient by the AIChE Management Division and delivered a keynote talk titled "My Management Journey, from Technology Developer to Innovation Leader".



**Dr. Bindu Krishnan** received the AIChE Industrial Progress Award, where she was recognized for her accomplishments in the development and commercialization of innovative, environmentally-friendly automotive and industrial products coupled with her passion for diversity and inclusion.

## WIC Luncheon

We had a great time at last year's Annual WIC Luncheon! **Dr. Shelly Peyton** from UMass Amherst's Chemical Engineering Department was this year's keynote Networking Luncheon speaker at the AIChE Annual Meeting in Orlando. Through her talk entitled "She Persisted (and is still having fun)", she highlighted how she keeps life and research interesting and how she has navigated her career trajectory to lead to one that has value to both her and her institution. Shelly is and has been an amazing mentor to so many chemical engineers and biomaterials scientists and we were honored to get to hear her perspective on keeping life and work fun!

## Panel Discussions & Workshops

Dr. Anita Shukla (Brown) and Dr. Whitney Stoppel (University of Florida) hosted three exciting panels.

**Overcoming Hurdles for Women in Innovation and Entrepreneurship:** Dr. Kathleen Sohar from the University of Florida Collaboratory for Women Innovators provided insight into the challenges women face in the process of obtaining IP, licensing a product, and starting a company.

**Advice and Mentorship from Leaders in Innovation and Entrepreneurship:** Jessica Winter (Ohio State-CBE), Grecia Ro (Intrida), Jessica Ocampos and Amy Beaird (Helicon Chemical) shared their experiences on IP and start-ups, followed by an Q&A with these amazing Women Innovators.



**Advancing into Academic Leadership:** Jennifer Curtis (UC Davis) and Susan Roberts (Worcester Polytechnic Institute) talked about the promotion process in academia; followed by Q&A with leading Women in ChemE including: Jennifer Sinclair Curtis (Dean of Engineering, UCSD), Susan Roberts (Dept Head, WPI), Sheryl Ehrman (Dean of Engineering, SJSU), Anne Robinson (Dept Head, CMU), Paula Hammond (Dept Head, MIT), LaRuth McAfee (Asst Dean for Diversity and Inclusion, McNair Program Director, UW-Madison).

WIC also hosted two workshops geared toward undergrads and grad students & postdocs. At the **Undergraduate Professional Workshop for Women and Minorities**, mentors from academia, industry, and national labs joined the undergrads for a lively Q&A session. Dr. Pushpa Murthy (Michigan Tech, COACH) lead a workshop on career development at the **Elevating Your Career for Graduate Student and Young Professionals workshop**, which was followed by a luncheon with mentors from diverse backgrounds and careers.

## Rising Star - Virtual workshop

On June 23rd, **Rising Star, A Leadership Workshop for Women Engineers** was held as a part of AIChE's All for Good program to advance women in engineering. The program utilized best practices and leading research on gender to build key skills necessary for women to attain an authentic leadership presence.

**RISING  
STAR**  
An AIChE Program  
Leadership Workshop  
for Rising Star Women Engineers

June Wispelwey, Executive Director and Chief Executive Officer of AIChE, has welcomed the participants.

Following June's inspiring introduction, Susan Dunlap, Principal of Susan Dunlap Associates, gave a presentation on understanding effective communication styles and the best practices for women to counteract perceptions and mitigate stereotypes. Through discussion and activities participants developed skills for communicating with a more authentic presence to effectively meet and network in the workplace and beyond. Participants received an introduction to a variety of common communication styles used by men and women in the workplace to:

- Explore the dynamics of gender communication norms and stereotypes
- Learn how the following skills can differ by gender and the potential impact to career progression
  - Confidence and Courage
  - Self- Advocacy
  - Presence

This wonderful day ended with a panel discussion titled "**Empowering Women in Engineering**". Panelists shared perspectives on how women can find their voice, navigate the workplace and communicate for success. Many thanks to WIC Chair Shannon Servoss, and Gina Gatto, Manager of Membership of AIChE for this moving discussion. We also want to thank our panelists who shared their stories and inspired many women in the field.

- Christine Bryant, Covestro, Sr. Vice President
- Delia Contreras, Honeywell, VP Engineering & Functional Excellence
- Christine Grant, North Carolina State University, Associate Dean of Faculty Advancement
- Cynthia Murphy-Ortega, Chevron, Manager, University Partnerships & Association Relations

**ALL  
FOR  
GOOD**  
Engineering for Inclusion  
A core priority of the  
Doing a World of Good campaign

## Developing Covid-19 diagnostics during sabbatical

### *An interview with Dr. Shannon Servoss*

WIC Chair Prof. Shannon Servoss has spent the past four months of her sabbatical developing new point-of-care diagnostics for COVID-19. She joined NOWDiagnostics in Springdale, AR last August to develop over the counter, saliva-based tests for influenza. As she says of her motivation, "About three years ago, a group from our department went to the Research Triangle in North Carolina. As we were walking through all of the labs, I realized how much I missed the lab. I tried to find ways to make projects for myself and ways to get into the lab, but... something would come up and I would have to ask students to take over something I started." Luckily, another faculty member, Bob Beitle, had a patent with NOWDiagnostics that he was not intending to pursue, so Servoss reached out to them to discuss the potential of her spending her sabbatical there.

The tests she is developing for COVID-19, lateral flow tests, function similarly to urine-based pregnancy tests. Specifically, she is developing a blood-based SARS-CoV-2 antibody detection test. As Servoss says of the choice of antibody tests, "The reason we started with an antibody test is that, based on the technology we have, it fit in best with the technology of the company. It also kept us away from the nasty COVID virus samples. The samples we are getting are after someone has had it, so they are not quite as dangerous. Hopefully, we find that the antibodies we develop when we have SARS-CoV-2 will actually lead to immunity for at least some period of time." These tests will be important in healthcare settings, as "if you have 50 nurses and 25 of them have antibodies, you can give priority to the nurses who don't have antibodies to stay off the floor where the COVID patients are and maybe limit the amount of contact they have. Talking about the other side of it, the staff, people that are checking in patients can be people that already have antibodies to COVID." Though the antibody tests are still in development, Servoss is optimistic about their applicability.

Because of the urgency of developing diagnostics, this research initially took over Servoss's time. As she says of balancing work, home, and academic duties, "Anybody that's done their PhD knows there are things you're doing that you are passionate about and you can just put all of your time into it. For at least a month or two, that's what this was for me. I could easily have spent 12 hours a day in the lab and been perfectly happy but I do have graduate students who needed guidance and I do have kids at home that need their mom. It's been a lot of intentional changes to my schedule. Making sure I didn't leave the house until 8 am, even if I was ready sooner. Setting a timer for the end of the day so my phone would go off and I would know I had to be out of the door. Scheduling infrequent meetings with my students to just check in and see how they're doing. Even if I'm not emailing them on a regular basis or we're not meeting weekly like we used to, making sure that I had contact and keep in touch."

Of her sabbatical work, she says "it's been great to be back in the lab. I think that's why I got into research to begin with. I love academics, I love so much about it, but that's why I got my Ph.D."



Her advice during this time is, "if you are a faculty member, take every sabbatical they let you take. Don't hold off. I held off for 12 years. I should have gone after 7 years. I think that sabbaticals can be incredibly useful whether you just take one semester to write a book or take a class or if you're taking a full year to do something bigger." And importantly of the current pandemic, "just stay safe. Stay home if you can; if you're not home, make sure you're staying safe because none of this is going away any time soon."

## Resources

The COVID-19 pandemic has drastically changed the way we work and the way we live day-to-day. Many of us have been working remotely and our new world entails balancing remote work life, child care, the stress of worrying about the impact of COVID-19 on family friends and society and many others. We wanted to share a few resources and helpful links with you to help you through this unique time. #StrongerTogether #WomenInChemE



### **Mindfulness & Stress Relief & Meditation Exercises:**

<https://www.gotostage.com/channel/awaremindfulness>

<https://www.headspace.com/health-covid-19>

<https://www.mindful.org/free-mindfulness-resources-for-calm-during-covid-outbreak/>

<https://www.tenpercent.com/coronavirussanityguide>

<https://my.life/>

### **Online Exercise Resources:**

<https://watch.lesmillsondemand.com/>

<https://www.downdogयोगn.com/classes>

<https://www.yogainternational.com/>

<https://www.fitnessblender.com/>

### **Working From Home & Childcare Resources:**

<https://www.yalemedicine.org/stories/8-tips-work-at-home-with-kids-covid-19/>

<http://www.jpétriglieri.com/couples-that-work-home-the-survival-series>

<https://classroommagazines.scholastic.com/support/learnathome.html>

<https://www.familyeducation.com/at-home-learning-resources-for-the-covid-19-outbreak>

<https://childmind.org/article/how-mindfulness-can-help-during-covid-19/>

<https://www.childtrends.org/>

### **Social & Emotional & Learning Resources:**

<https://idontmind.com/journal/just-checking-in-ten-minutes-ten-questions>

<https://www.pleasepassthe love.org/covid-19-resources>

### **A friendly note...**

*There has been a lot of talk about the burden that women professionals are feeling during the pandemic with additional childcare. While this is a great discussion and a topic that requires the much-deserved attention, a neglected demographic is that of the single professional women. Several statements such as single people have an advantage and can be more productive in a pandemic lead to undue pressure on the single women. It causes them to feel like their challenges are invalid or unjustified. The other side of the coin is that a lot of single people are feeling especially isolated. They are limited to their houses and spend weeks with no contact and no physical touch with another person. This extreme isolation, as we know, are great triggers for depression and anxiety. This is further aggravated by feeling like their struggles are unjustified. Thus, I want to reach out to this demographic and say, "you are justified in feeling whatever you feel". This is a tough situation for everybody in their own ways -- it is a pandemic -- a global crisis! You need to focus on what is best for you and on self-care. Your challenges are also real and require thoughtful care. I would also like to reach out and encourage you to contact me if you are looking for company. I know I would love some!*

Sapna Sarupria (ssarupr@clemson.edu)

## Our Mission

Women In Chemical Engineering (WIC), an AIChE community will lead in promoting the entry, development, and full participation of women in the Institute and the profession through the following strategies:

- Develop / distribute resources on subjects pertaining to women in the profession.
- Mobilize AIChE to meet the needs of existing and potential female members of AIChE and the profession.
- Provide networking means for women in AIChE to use each other as resources.
- Increase the visibility of women within AIChE and the profession.

## 2020 WIC Executive Committee

### **Chair**

Shannon Servoss, [sservoss@uark.edu](mailto:sservoss@uark.edu)  
Associate Professor, University of Arkansas

### **Past Chair**

Julie Renner, [jxr484@case.edu](mailto:jxr484@case.edu)  
Assistant Professor, Case Western Reserve University

### **Vice Chair**

Ann R Fornof  
Advanced Research Specialist, 3M  
Secretary

### **Program Chairs – 2020 Spring Meeting**

Mrunmayi Kumbhalkar,  
Sr. Research Specialist, Dow

### **Treasurer**

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### **Industry Liaison**

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Principal Scientist, Johnson & Johnson

### **Student Liaisons**

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Health and Safety Engineer, ArrMaz  
Toni Kirkes  
Research Assistant, Texas Tech University  
Heather LeClerc  
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