

## From The President's Corner...

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These are different ways to say the same word: family, which is what I have grown to call everyone that I have met through this wonderful organization. Potential is one thing, but what one decides to do with it is another. I am immensely proud of what each and everyone of our members do with their skills and their dedication towards the things that they are passionate about. I have been given the opportunity to lead a team of 15 exec members. From the very beginning, I have witnessed them grow and show their commitment for this org. Since COVID-19, we had to adapt to an online presence and I was initially afraid that we would lose the familial atmosphere that we would normally have if we were to meet in person. Surprisingly however, that was never the case at all. With just a click of a button, we were able to do the weekly exec meetings, professional speaker events, and fun game nights as if that online barrier had no negative impact on our closeness.

Our chapter continues its efforts to recruit new members and to provide several opportunities for self exploration and professional development. Here are some highlights of some of the things we did this semester: We initiated a sister chapter with AIChE UFES

(Universidade Federal do Espírito Santo, in Brazil) and had events where we taught each other our respective cultures. We virtually attended the North Central Regional Conference which had a Career Fair and insightful presentations. There were weekly game nights where we played Among Us and Code Names as well as a couple of mentor-mentee events called, "Mario Party" where upperclassmen and underclassmen to get to know each other. Our social media accounts were revamped and helped to advertise our events like our Valentine's Day bake sale that raised over \$100. There were two collaboration events this semester and we hope to partner with more student orgs in the future! With the Graduate Student Association, we planned a farewell party for the 2021 graduating class. We also partnered with Illinois Tech Railroad Club with a presentation on railroad transportation in the chemical industry. In our usual Wednesday general body meetings and local section meetings we heard from speakers on topics ranging from the paper industry focusing on project and process engineering to new "green" hydrogen technologies. This newsletter will tell more about these events!

I would like to extend a big thank you to the exec board, our advisor Donald Chmielewski, the general members, and the ChBE staff and faculty for all the hard work and support that has formed the success of this organiza-

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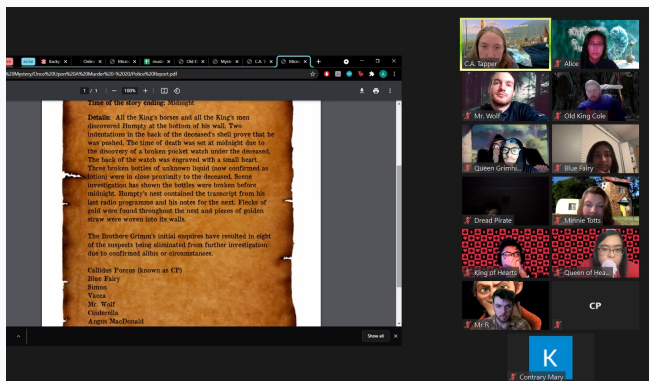
tion. I wish everyone the absolute best and I cannot wait to see what more we can accomplish moving forward! And lastly, stay kind because kindness always wins! <3

Jessica Forbes



## This Semester's Events

Hi, hi, it's Abby your 2021 Internal Vice President! I have moved up in the "ranks." If you have been reading previous newsletters you would know me as the two-term treasurer, but that is no longer. I am now the Internal VP, OoOoo very fancy! I am in charge of organizing and executing our social and professional events that aren't the Wednesday GBM's (that's Kim's job). This semester has been interesting. With another virtual semester under our belts, we all know that virtual events are tricky but so necessary. To try to make it more engaging, I have held weekly game nights so that there is no question as to if there is an event or not. If it's a Friday at 7 pm people can come to play some games with AIChE.



One of my favorite events this semester was the Murder Mystery party. It was a hassle to organize and actually get the information packets from the company, which I am sure Anthony will mention in his section, but the event itself was super fun. Everyone played their roles beautifully and it made for a great event!

Another event that was fun was the conference watch party. Although the conference was virtual, IIT had recently allowed restricted in-person events, so we took advantage of our newfound freedoms, ordered some burrito bowls to the Perlstein Hall auditorium, and had a socially distant conference watch party.



In our last event of the semester, we finally got to have our annual End of the Year BBQ at Man on the Bench Park. While the in-person event came with its restrictions, we were able to have a lot of fun picking up our grab-and-go foods and enjoying the awesome bubble machine while playing a couple of yard games.

Next semester I plan on doing a lot of events that will ensure the ChemE family is stronger than ever. I am looking forward to an in-person semester and I am excited for what is to come. I would like to extend a huge THANK YOU to everyone in AIChE for making this such a rewarding experience. Also, thank you to everyone on the executive board for all of their hard work in making this organization successful, it would never work without all of your support. I hope to see everyone in person soon! Stay safe!



Much love,  
Abby :))

## Mentor-Mentee

Hello! My name is Allison Miller and I am the Mentor-Mentee Coordinator for the American Institute of Chemical Engineers. This role allows for a lot of opportunities for bonding within this organization. My goal as a Mentor-Mentee Coordinator was not only to pair people up with their mentors, but ensure that good relationships are formed in order to have more unified Chemical Engineers. Something that I have to work on for next semester is getting Alumni Mentors for those who would like one in order to make everyone's experience enjoyable.

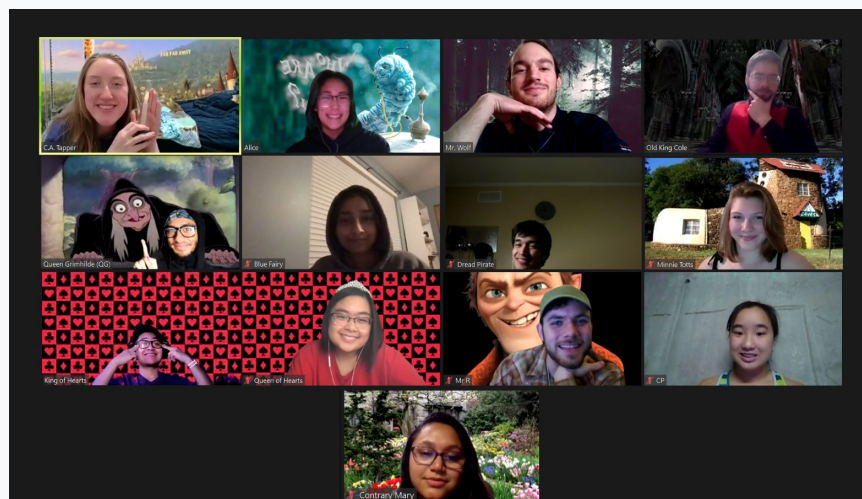
This semester mainly focused on building the foundation for future events. One recurring event that was formed was called Mario Party, which was held during the General Body Meetings and consisted of fun games that could bond AIChE members together. As mentor-mentee pairs were already chosen from last semester, I mostly focused on planning for future events and testing out the waters with said pairs! So far, we have played the games Longwave and Skribbl.io. I found Longwave to be very collaborative and a good chance to get to know the people within teams.

I believe that the mentor-mentee program is a great way to expand on the relationships within this organization while also being a good support system for anyone who has any troubles. I hope that the future of this program leads to an expansion of involved students who feel secure about their major!

## A Treasurer's Tale

Hello everyone!

My name is Anthony Mendiola and I am residing over the Treasurer role from Spring 2021 to Fall 2021. In essence, the treasurer role is focused on the behind the scenes of the org, anything that has to be ordered, budgeted, and purchased would go through the treasurer. This position had a bit of a learning curve because I was directly interacting with the university's purchasing and budgeting system (BuyIt and Presence respectively), but it was very engrossing. I had the opportunity to work with several of the university's faculty members in the campus life and procurement department to resolve issues and pursue our organization's events and desires. The first half of the semester was honestly a tormented strain on my soul, this was mainly due to the fact that I had to sort out technicalities with IIT in order to gain access but afterwards it was smooth sailing. The only thing that was a pain was working with suppliers and getting official tax forms for the university in order to purchase our supplies and software. So far we have been able to buy supplies for the ChemE car team, gift cards for events, and a Murder Mystery game. On top of this we were also able to buy a bubble machine and order food for the End of the year BBQ which was a fun time. Overall, this position has been one that I have been both grateful for due to learning so much about how student organizations are run but it has also been a mish-mash of emails, websites, and general confusion. Also on a side note, during executive board meetings I was able to contribute a few words of modern slang to teach our faculty advisor, Donald Chmielewski. This was a blast and I am very grateful for him dealing with our shenanigans.



## A ChemE Car Story

Hello, I'm Alejandro Torres, a first-year chemical engineering student at Illinois Tech and the Chem-E Car Coordinator in the AIChE Student Chapter. Being on the executive board during the 2020-2021 school year has been a difficult but ineffably rewarding experience. We are a tight-knit family that has lots of fun while simultaneously keeping each other accountable to make our chapter the best it can be and give our members the best possible experience.

As the Chem-E Car Coordinator, I was responsible for leading the team in designing our car, relaying information about the team's progress with the executive board, communicating with administration, and taking care of the paperwork in preparation for the annual competition.

So, what exactly is Chem-E Car?!

Every year, AIChE national organization hosts an annual competition where AIChE chapters across the world build shoebox-size autonomously operated vehicles. There is a regional competition, in which IIT competes in the North Central region, and national competition that teams from each region qualify for.

There are two components of the competition: a poster/safety evaluation portion and a performance section. Every team submits a poster and supporting presentation explaining how their car works and addressing any safety hazards, since safety is of the highest priority in all engineering disciplines and endeavors. As a fun add-on, winning teams are announced on the day of the competition for having the best posters. Of course, the main highlight of Chem-E Car is the actual running of the cars:

The goal is to set your car such that it will stop after being started at a specified distance. About an hour before the actual running of the cars, the organizers announce the distance that the car needs to travel. Teams need to be ready to set their car to stop at any distance from 15-30m within a short period of time. There are two runs and the team with the car that gets closest to the finish line wins. In a typical year, the organizers would also place a random mass between 0-500 grams on each car, but that factor has been eliminated since the COVID-19



pandemic makes things harder to manage.

Of course, this is no easy feat. It requires applied knowledge of science and engineering principles such as chemical reactions, mechanical design, circuits, economic restrictions, and many more. This is also why teamwork and collaboration are needed for teams to build the most accurate, reliable cars. These are skills that all engineers need in their professional careers, so I'm indubitably grateful for the opportunity to have this experience early on in college.

This year, the team faced many challenges and arriving to the competition with a working car proved no easy task. Being a freshman, I lack some technical skills that older students had. Another challenge was having to work with a very small team, as much work had to be done spread across a small group of about three individuals. Despite this, we managed to make some major improvements to last year's design by building energy-dense cylindrical zinc-air battery cells and changing the theme of our car to "Mario Kart." Why Mario Kart of all things, you may ask? Well, besides the obvious car theme, our former Chem-E Car advisor, Donald Chmielewski, has always said that "chemical engineers are just glorified plumbers", and who's the most famous plumber of them all? I think that question answers itself.

**Continued on p.6**



## Young Professional Liaison

My main role as AIChE Awards Dinner Coordinator/YP Liaison was to carry out an annual event celebrating the academic and professional development of senior students. This would be starting from creating the itinerary, finding guest speakers, organizing and designing the venue, and coordinating the catering with working staff. Unfortunately, due to Covid-19 we were unable to carry out the plans we had, but I did learn how important it is to coordinate with others for such a big event. I was able to help assist others on AIChE board through this semester instead, and I had a lot of fun learning what their roles entailed.

- Hans Chung

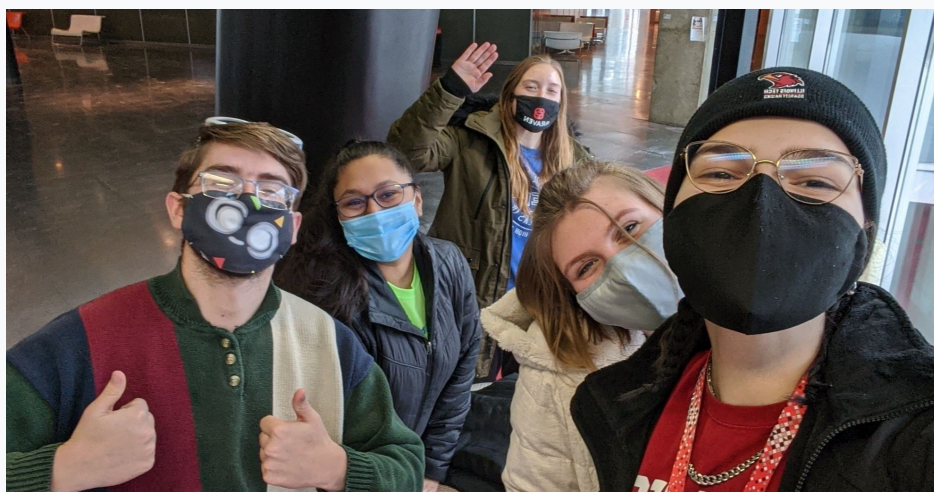
## Fundraising Chair

Hi! I'm Cameron Kanofsky, this year's fundraising chair for AIChE at IIT. What a time to join the executive board! In the midst of a semester that remained virtual, having such a physically focused role was quite the challenge.

Luckily, I spent my first year and a half here at IIT getting to know a lot of my fellow Chemical Engineering majors, so that was never a problem. Rather, it was that planning online fundraising is incredibly challenging, as so many of the options rely on either having tables set up or going out to places like restaurants.

However, that wasn't enough to stop me. Aside from assisting in planning the High School Outreach Engineering Expo, I took on my position headfirst, and by week three was setting up a full virtual bake sale. Essentially, we had other exec members volunteer to bake treats, and then I made Google Forms for delivery to yourself or others on campus as a treat. Per Professor Chmielewski's recommendation, this was scheduled to be delivered for Valentine's Day weekend, which turned out to be a lovely plan. At \$2 per treat, and with 7 different options, the fundraiser was a success, netting us about \$140 in sales!

Beyond that, I focused on putting together some basic plans for next semester and otherwise bonding with exec. AIChE truly is a family, and I'm honored to be a part of it!



## About our Speakers (external VP)

Hello everyone! My name is Kimberley Goveas and I am the current External Vice President of AIChE at IIT. Every Wednesday starting around the lunch hour, we host our organization's General Body Meetings which would usually take place in Perlstein Hall. Similar to last semester, AIChE preferred to maintain our weekly General Body Meetings virtually, and we've been able to interact and participate with each other through video conference calls to hear our speakers' presentations. The speaker presents on a subject specific to their profession at each of these sessions, allowing students the chance to address the post-collegiate encounters of our speakers. This semester's speakers have included experts from tech development firms, sustainability firms, executives, as well as distinguished students and collaboration with on-campus student organizations. There have been a wide range of engaging topics explored by the speakers a few of which include technology advancement, testing, lab research, consulting, job interviews, and other technical areas. We have also had the utmost pleasure of learning about chemical transportation, an overview of process control, a process from big oil to industrial biotech, and water treatment. This provided students with a wealth of knowledge about the technical and academic fields. Check out our social media accounts to read more about our speakers. Feel free to contact me at [kgovease@hawk.iit.edu](mailto:kgovease@hawk.iit.edu) if you have any questions or concerns. Thank you!

- Kimberley Catherine Goveas

2/24	Paula Hajakan	<b>About USG and Process Engineering</b>
3/24	Todd Burnley	<b>An Overview of Processes and Process Control at South Holland Metal Finishing</b>
4/14	Rachel Brenck	<b>Becoming CarbonSmart: From Big Oil to Industrial Biotech</b>
4/21	Tom Doyle	<b>Internships as a Corrosion Engineer/ Chemical Analyst and a Water Innovation Engineer</b>
4/28	Heather Pecho	<b>A Senior Perspective of College at IIT</b>

## ChemE Car Cont.

Going into this year's competition on April 17, we were confident with our new design that we had the potential to qualify to the national competition. However, there are 100 things that could go wrong with the car in any given year, and any one of them could result in drastic consequences. Unfortunately, our motor stopped working for no apparent reason on the morning of the competition. We managed to obtain a new one, but hooking it was a major time-consumer. To make matters worse, the battery, while producing the necessary voltage, wasn't generating nearly as much current as we expected and what was needed to power the motor. Despite our best efforts to fix the issue, we had to forfeit both rounds. It wasn't a complete loss though, as our advisor Mohammed Asadi gave us suggestions for our battery and helped us realize that we could charge the batteries to maximize current output. This, among other factors, is something we'll take into consideration going into next year. Furthermore, we formulated many ideas this spring to change our car in fun and interesting ways that didn't come to fruition due to time constraints. With the next competition being a year away, we plan to implement as many of these ideas as possible. Hopefully, we will succeed as a team and qualify to the national competition.

Notwithstanding, I'm extremely happy we had this opportunity when many teams couldn't even participate. I have become a better and more knowledgeable student and leader as a result, and I'm looking forward to what next year has to offer.

## Sister Chapter Liaison

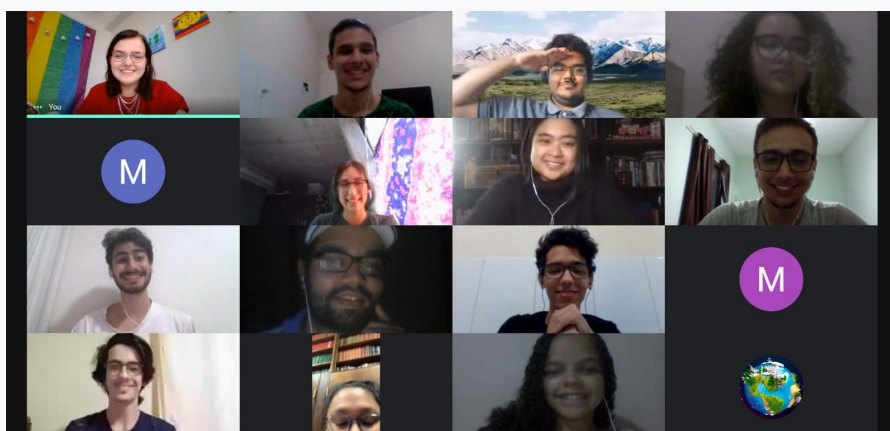


# UFES

Our first event of the semester was an introductory meeting for our brand new executive boards, where we just got acquainted and exchanged contact information so that we could start to build a stronger relationship with them. The other two events hosted this semester were culture exchange events. In these, our chapters presented information about their country, school, and culture/language so that we could all be more familiar with each other.

I am so thankful to hold this position in AIChE. All of the other executive board members have become like a second family to me. Especially as a First-Year, having such an amazing group of people around me that have been in my position is such an amazing thing to have! I love them all very much and hope they know how great they are. This also goes for the UFES Chapter, they are a wonderful bunch of people and I am so lucky to have gotten to know them and look forward to continuing to interact with them!

Hello everyone! I am Trinity Martin and I am AIChE's new Sister Chapter Liaison. I am a first year ChemE from Kansas City, Kansas. In this position, I am responsible for coordinating with our sister chapter and planning events with them as well as making connections in Chemical Engineering with those around the world! This year we continued the fantastic partnership with our Sister Chapter at UFES, Federal University of Espirito Santo, in Brazil. Their chapter is much smaller than ours, and they speak Portuguese and English, so there was some adjusting to be done but luckily we have been able to have many events with them this semester. These barriers were minimized with the help of Julia, the UFES chapter outreach coordinator!



~ Trinity Martin  
Sister Chapter Liaison

## Outreach Coordinator

Hey everyone! My name is Adeelah Shamshuddin and I am the 2021 Outreach Coordinator. My experience as this year has been so insightful and valuable despite it having to remain online.

This semester, our first outreach event was via the AIChE 13th Annual Midwest Regional Conference. Through the local section of AIChE, I was able to connect IIT students with the Engineering Expo. In this event, ChemE student-volunteers from IIT hosted interactive breakout sessions with 5-6 HS students to chat about their experiences and to discuss any interests or questions with the students. Based on feedback from this event, the student-volunteers really enjoyed the experience! After this, we were unable to do any group outreach activities. However, I was able to do solo outreach work through the admissions office by discussing with prospective students my experience as a ChemE student and member of AIChE.

Next semester, my goal is to implement long-term interactions between local HS students and ChemE students at IIT by starting a pen pal program. The program will consist of reaching out to high school students interested in ChemE and pair them with a ChemE student at IIT. My fellow exec members had expressed a lot of interest and encouraged me to go forward with it, which I am very grateful for! I will be working on solidifying the plan and getting a program started for the Fall 2021 semester. I am so excited to start working on this initiative!

Finally, thank you to the rest of the board members for making my 1st year as a student at IIT and as a member of AIChE so special. This has been a great opportunity for me as a 1st year to get out there and stay connected under current circumstances. I have learned so much from the other students on the team and am thankful to have this experience. I look forward to working with this group moving forward and doing some great things for AIChE and our community!

Adeelah Shamshuddin

## Conference Coordinator

My name is David Hults, and I am the Conference Coordination for this calendar year. This semester, AIChE held another virtual conference which our chapter attended, including many breakout sessions with opportunities to hear from a panel of experts, learn more about smart energy consumption, and many more! We were able to stream the regional conference in Perlstein hall as a chapter, attending virtually and enjoying the free food. The conference was a great experience for some of our members to reach out and hear from various professionals throughout the Chemical Engineering field. This year made it easy to attend, as no flights needed to be booked or conference registration to pay for, but still proved to be a bit of fun through it all!





## Local Section Meeting/Plant Tour



Hello, my name is Kiera Puls and I am the current Local Section Meeting/Plant Tour Coordinator.

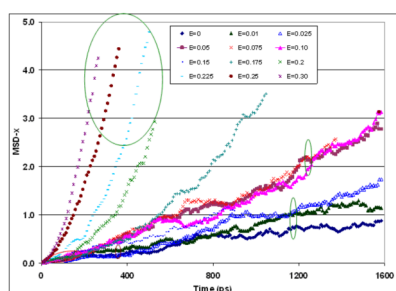
My job is to promote the attendance of students to the Chicago local section monthly meetings and organize tours to operating plants and chemical engineering's workplace.

Due to the pandemic, my main job was informing members about Chicago local Section meetings and coordinating our attendance. Under normal circumstances, I would have also coordinated plant tours, but the pandemic made that difficult to organize.

This semester we heard from great speakers around the country including our very own, Professor Sohail Murad. Professor Murad spoke at the March meeting about using molecular modeling for screening and optimizing membrane based separation processes.

Earlier in the semester, we heard from Professor Ah-Hyung Park, at Columbia University, talk about the development of carbon capture. Finally, in April we heard from Theodore Krause, laboratory program manager, about Hydrogen and Fuel Cell technology.

**Effect of Electric Field on MSD of Na<sup>+</sup> Ion in Solution (Applications in Electro-deionization)**



Murad, Journal of Chemical Physics, 2011; 2012.

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## Graduate Liaison

Hey y'all!



I was elected as the new Graduate Liaison of AICHE for this year! This role mostly consisted of maintaining communication within and between AICHE and our Graduate Student Association (GSA), and organizing different events with the GSA.

If you didn't know, COVID was everywhere and still is, and because of that this year was a huge speed bump for us. GSA wasn't active most of the year, and though there weren't many, I still attended the GSA meetings to keep everyone up to date with what we AICHE were doing as well as informing AICHE on what the GSA were up to this year! But that didn't stop me from helping AICHE as much as I could, for example creating a video for our sister chapter in Brazil for one of our events, emailing different organizations for future collaborations, helping create poster for events, and in the end being able to finally host an event with GSA, which consisted of an online meet-up between all graduate and undergraduate students graduating, and the faculty members of the ChBE community!

It was a really fun and unique experience working in AICHE, especially because of online meetings and events! Though I am a first year student, I did not feel left out of anything at all, since all our amazing members made sure everyone was up to date with everything and weren't left out of anything! I loved how even though there are so many positions, everyone has a lot of work to do and can help anyone at any time! I really enjoyed being in the executive board of AICHE, and I am already looking forward to in-person meetings hopefully next semester!

-Vaibhavkumar Dubey

## Public Relations

Hi everyone, I'm Gayle, the PR chair. This spring semester, we held weekly virtual events including the Friday Game Nights, Mario Party, Murder Mystery Party, and NCRC Watch Party, just to name a few. Due to the pandemic, not a lot of students are on campus which is why we have focused on reaching out to the student body through social media

in order to promote events and notify them about other opportunities. The events are posted at least once a week on our social media (mainly Instagram, but Facebook as well). Not only that, but we post any various links and on our carrd account ([aicheiit.carrd.co](http://aicheiit.carrd.co)) to make it easier for students to access event links and more information. Let us know through email if you do not know our respective social media platforms and we would be happy to help you out! We have re-



designed our website, from using wix to google sites, so make sure to check that out as well. I have been very grateful to have been given this opportunity and I'm excited for the events my peers will be planning for next semester, so stay tuned for that!

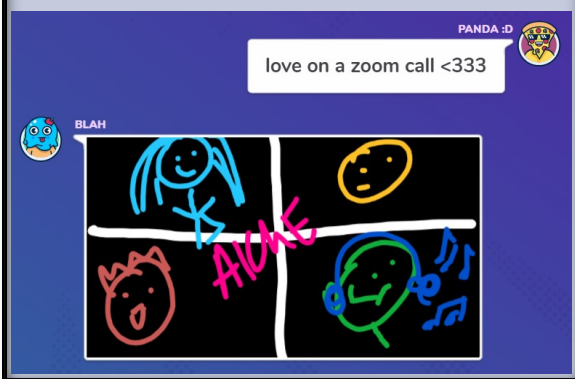


## A Note From the Editor

Hello there! I am Danielle Kit-taka, the secretary of this wonderful student org. I took over for the last secretary Kim M. halfway through her term, so this is my 2nd semester in this position. My main duties consist of keeping notes during exec meetings, drafting and sending the weekly emails, as well as taking attendance at events. At the end of each semester I compile and create this lovely newsletter! I bug and pester the board members throughout the whole semester to get me things that they want communicated with the general body, but I have to especially bother people when making this newsletter. Sometimes that means daily communication with possibly passive aggressive memes.

It takes a team to run an org like this, but our fantastic president Jess does a great job of keeping us together and on track. I also am super thankful to our faculty advisor Don Chmielewski (who won the Best Faculty Advisor of the year at IIT's Talon Awards). He is extremely supportive and helpful and truly is the best. I regret that much of my communication with this board is pestering, because I truly like everyone on this board and have loved having them as part of my ChemE family <3

Here's to more and better AICHE activities in the coming semester!



## AIChE Mission Statement

*“Enriching chemical engineering students with the knowledge and ideas necessary for their future career through innovative and creative thought processes.”*

### 2021 Executive Board

President	Jessica Forbes
External Vice President	Kimberley Goveas
Internal Vice President	Abigail Gunderson
Secretary	Danielle Kittaka
Treasurer	Anthony Mendiola
Outreach Coordinator	Adeelah Shamshuddin
Public Relations Chair	Gayle Cabreros
Local Section/Plant Tour Coordinator	Kiera Puls
Mentor Mentee Coordinator	Allison Miller
Conference Coordinator	David Hults
ChemE Car Coordinator	Alejandro Torres
Sister Chapter Liaison	Trinity Martin
Graduate Liaison	Vaibhavkumar Dubey
Awards dinner Coordinator/ Young Professionals Liaison	Hans Chung
Fundraising Chair	Cameron Kanofsky
Faculty Advisor	Donald Chmielewski

### Contact us!

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**Email:** [aiche@iit.edu](mailto:aiche@iit.edu)

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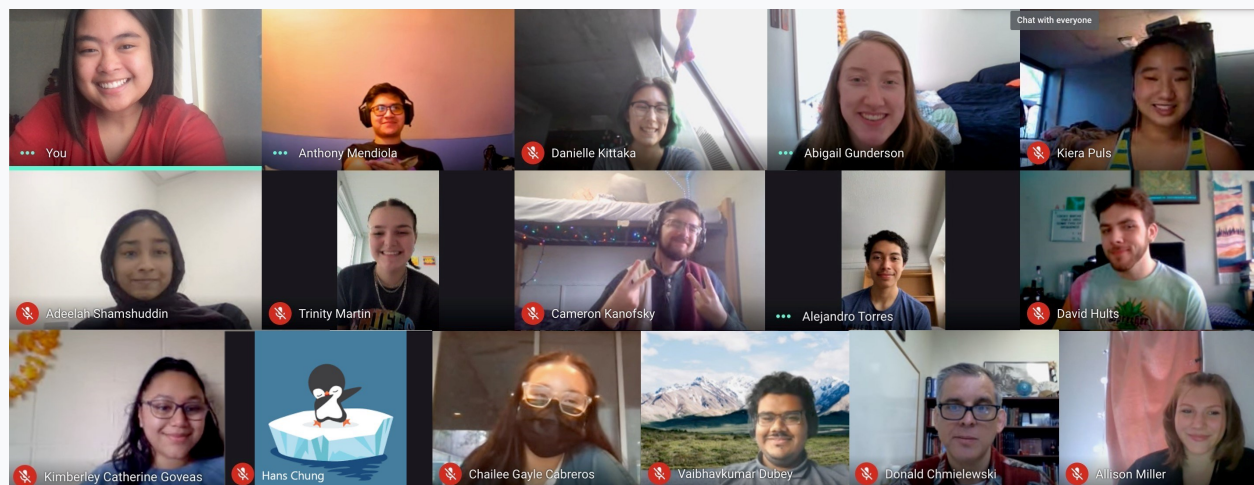
**Presence:** <https://iit.presence.io/organization/american-institute-of-chemical-engineers>

**Discord:** <https://discord.gg/KjN8hAd>

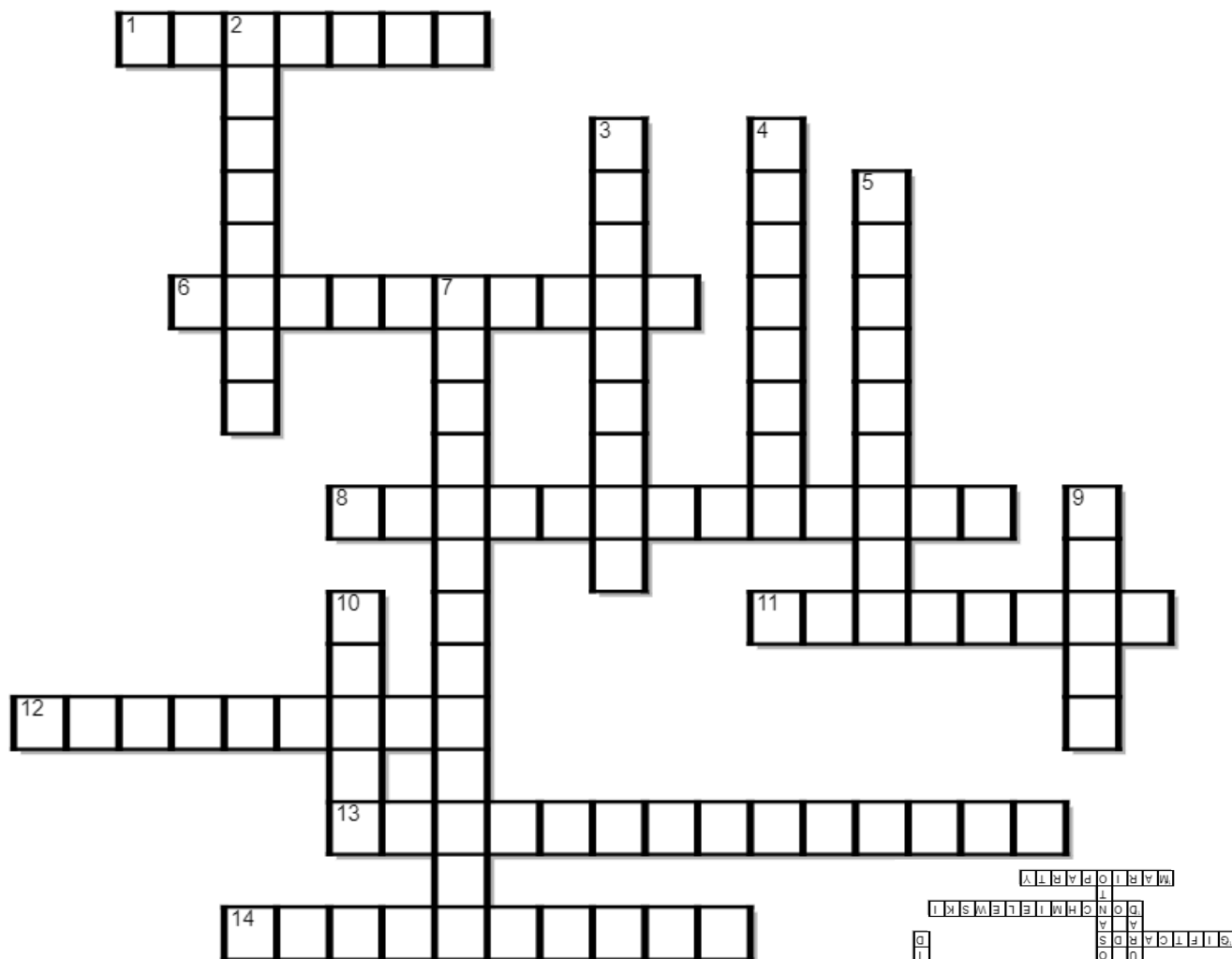
**Facebook:** AIChE-IIT

**Instagram:** @aiche.iit

**Snapchat:** aiche-iit



## ChemE Crossword



## ACROSS

- 1 A soapy scenery for a BBQ
- 6 Our Instagram handle
- 8 Favorite Virtual Event
- 11 Collaborative Mario Party game
- 12 Game night prizes
- 13 Best faculty advisor of the year!
- 14 Mentor-Mentee event

## DOWN

- 2 A LOVEly Fundraiser
- 3 Name of the ChemE car
- 4 Most important subject
- 5 CBME building
- 7 Location of Sister Chapter
- 9 Biggest Damper of the year
- 10 Our very own Local Section meeting speaker