ANNUAL REPORT AICHE TKMCE 2023-24

The AIChE TKMCE Student Chapter, affiliated with the American Institute of Chemical Engineers (AIChE), likely operates with a focus on engaging and empowering chemical engineering students through various activities and initiatives. The chapter engages its members through regular meetings, events, and activities aimed at fostering professional development, networking, and knowledge sharing. Technical workshops, seminars, and lectures on topics relevant to chemical engineering students. These events covered areas such as process design, sustainability, safety protocols and career development skills.

Based on the responses towards applications invited by Prof. Al Ameen A, the Faculty Advisor of AIChE Student Chapter, the following students were selected as the new office bearers.

Position	Name
Executive Committee	
President	Akash S Babu
Vice President	Ajoshn Jose
Secretary	Athmaja D V
Treasurer	Parvathy B
Programme Committee	
Vice-Chairperson (Technical)	Devi Chandana S
Vice-Chairperson (Documentation)	Diya Saji
Vice-Chairperson (Publicity)	Saniya Shaji Kani

The new executive body under the mentoring of the faculty advisor came into effect from September 2023. Meetings were conducted on regular basis for the effective functioning of the Chapter and its various subcommittees. The selection of members to the Design, Documentation and K-12 subcommittees were through a strict interview by the Executive Committee.

The year 2023-24 witnessed numerous and variety events hosted by the AIChE TKMCE Student Chapter. Starting with the Freshman Orientation various events like Chem-e-Car, Trivia Night, Jeopardy, skill developing workshops and webinars with other chapters were organized enhanced students' problem-solving abilities, teamwork skills and building International connections.

FRESHMAN ORIENTATION



The AIChE TKMCE Student Chapter conducted the first-year orientation on 27th November 2023 at 4:30 pm in the seminar hall of the Chemical Engineering Department. The current President of the Chapter, Akash S Babu, initiated the session by introducing the AIChE Chapter and its members, followed by the circulation of the attendance sheet and a warm welcome to everyone. Before the presentation, the President discussed with the students their interest in Chemical Engineering, the distinction between chemistry and chemical engineering, and emphasized the unique position of AIChE in our college. During the main presentation, key topics covered included physical and life sciences in chemical engineering, the evolution of chemical engineering, the formation of AIChE, essential software knowledge, and employability in the field.

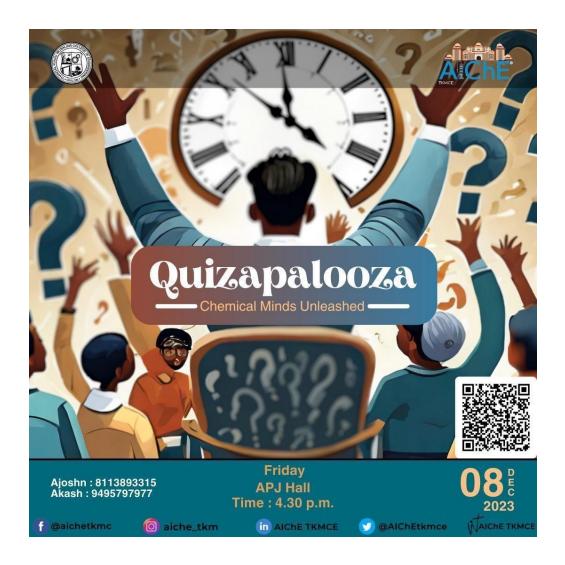
Faculty Advisor of the Chapter, Prof. Al Ameen A, highlighted the importance and formation of AIChE and encouraged first-year students to actively participate in events and workshops. Vice President Ajoshn Jose elaborated on the benefits of AIChE membership, interacted with students, and discussed various activities such as industrial visits, events conducted by AIChE and student chapter memberships. As part of a little entertainment, the presentation was concluded with a bottle flip game, where participants were divided into two groups, and the winning group received acknowledgement and a prize. The orientation concluded at around 6 pm with optimism about student participation in AIChE events and wished everyone luck in their endeavours.







QUIZAPALOOZA: CHEMICAL MINDS UNLEASHED



A trivia night, "Quizapalooza: Chemical Minds Unleashed" was hosted on December 8th 2023. The event took place in the APJ Hall at 4:30 pm and was coordinated by Akash S Babu and Ajoshn Jose. A total of 8 teams with 4 members each took part. The event was conducted in 4 rounds - Mathematics, Pop Culture, Chemical Engineering and Rapid Fire.

The first round was based on Mathematics and the round was hosted by Akash S Babu. A total of 10 questions were asked and the first team to write down and say the answer were awarded points. At the end of the round, out of the 8 teams, 7 were qualified for the next round.

The second round was the Pop Culture round. Questions ranged from movies to TV shows and music. This round was hosted by Ajoshn Jose and the teams that gave the correct answer were awarded points. Based on the scores obtained, the team with the lowest score was eliminated. The third round was the Chemical Engineering round. This round was also handled by Akash S Babu and a total of 3 questions were asked to each team. Questions were asked from all the core subjects. At the end of this round 2 teams with least scores got eliminated. The fourth and last round of the event was Rapid Fire and was handled by Athmaja D V. Each team was supposed to give answers to all three questions asked to them in a minute. The winners were declared based on their scores obtained in the fourth round.

The Faculty Advisor of AIChE TKMCE Student Chapter, Al Ameen Sir, Head of the Department, Saibi Miss and Manikandan Sir were present throughout the event along with all the execom members.

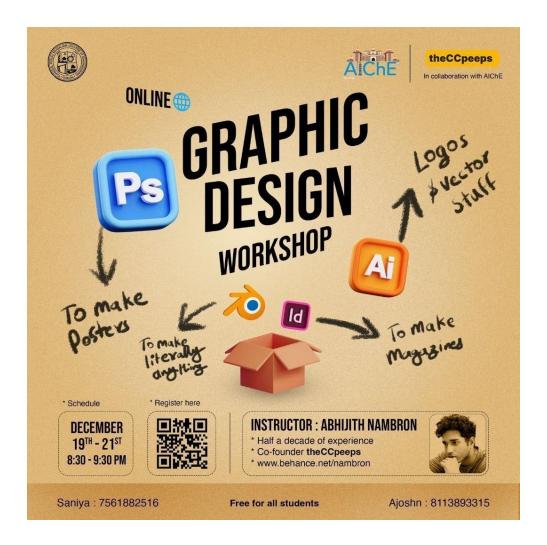
The winners were awarded prizes. The event concluded at 6:30 pm with refreshments provided as well.







GRAPHIC DESIGN WORKSHOP



Day 1: 19th December 2023

On the 19th of December 2023, the Graphic Design Workshop, organized by AIChE in collaboration with the CCpeeps, took place via Google Meet. Abhijith Nambron, co-founder of the CCpeeps and Design Head of TKM Mun 23, Media head of Hult Prize TKMCE, served as the mentor. A total of 59 individuals registered for the workshop.

Saniya Shaji Kani, Vice chairperson Publicity and the event host, welcomed the participants and introduced the mentor. Commencing at 8:30 pm, the session attracted 17 participants and covered Photoshop basics, tool familiarization, background removal, and other fundamental aspects of Adobe Photoshop 2022. The mentor, Abhijith Nambron, actively engaged with the participants, addressing doubts and queries. The session concluded at 9:30 pm, followed by a vote of thanks from Ajoshn Jose, Vice President AIChE TKMCE.

On 20 December 2023, the Day-2 session of the Graphic Design Workshop was conducted online via Google Meet. The event commenced at 8:30 pm with 14 participants and featured Abhijith Nambron as the primary speaker. Nambron delved into more advanced Photoshop tools, guiding participants through the process of creating an ID card from scratch. His detailed explanations encompassed each tool's functionalities.

Following Nambron, Ijab M Rahman, who is also the co-founder of the CCpeeps, continued the session, addressing even more advanced tools within Adobe Photoshop. The event proved to be interactive, with participants actively posing questions.

The meeting concluded at 9:30 pm, with participants assigned the task of independently crafting their own ID cards. Submissions were to be made through a Google Form provided by the CCpeeps by the following evening. Furthermore, participants were encouraged to reach out via WhatsApp or phone call for any clarifications they face during their assignment. The Day-2 workshop was a productive and engaging session, enhancing participants' skills in Photoshop while fostering an interactive learning environment.

Day 3: 21st December 2023

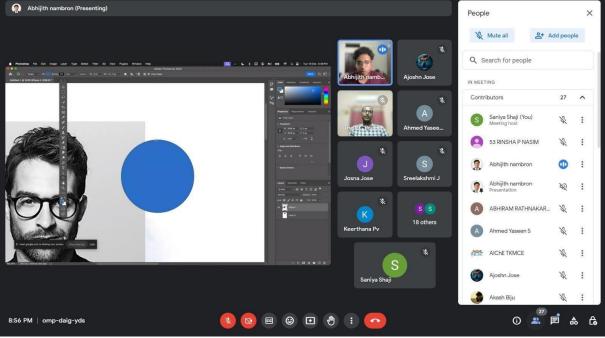
On the 21st of December 2023, a productive session was conducted via Google Meet. The session, led by Abhijith Nambron, commenced at 8 pm with 4 participants and spanned two hours as per the participants' prior request communicated through WhatsApp. During the session, participants actively engaged in designing a poster from inception to completion, basing their work on a design chosen the previous day. Abhijith Nambron meticulously elucidated the tools employed for each stage, providing comprehensive explanations.

A brief 5-minute break allowed students to address their queries, fostering a conducive learning environment. The participants, demonstrating enthusiasm, actively posed questions and interacted with the mentor. The session concluded at 10 pm, marked by a vote of thanks delivered by Akash S Babu, the President of AIChE.









THE REUNION



The AIChE TKMCE Student Chapter of TKM College of Engineering organized "The Reunion", an Alumni Meet on 30th December. The meeting was conducted online via Gmeet at 8pm and lasted for about 2 hours. The previous AIChE execom members and other alumni participated in the meeting.

The meet started with the current President, Akash S Babu welcoming everyone gathered and introducing the current execom. Faculty Advisor of our chapter, Al Ameen Sir also gave a brief introduction. The current execom members then introduced themselves and shared how excited they are to hear the experiences of their seniors. Madhava Krishnan (former AlChE President 2020-21), Devipriya Mudiyil, former (Former AlChE President 2021-22), Ansi A S, (former Vice- President 2021-22), Hannah Kurian, (former Secretary 2021-22), Amritha Sudarsan (former

K-12 chairperson) and Muhammed Ijas N(former K-12 Head) spoke about their experiences. They talked about their current jobs, studies and shared tips and tricks with their juniors. They also spoke on the importance of textbook reading and paper reading and how helpful will it be

while doing Masters. They also shared their experiences when they were execom members and how they bagged the Best Student Chapter Award. Madhava Chettan spoke on the importance preparing an Annual Plan for the Chapter as well as on how to do collaborations with other chapters. Restarting K-12 and FiChep was also discussed in the meet.

Other than sharing experiences and discussing on how to improve the Chapter, this meet served as a chance for all the alumni to meet with their old friends and juniors, rekindling memories and helping pave the way for future.







RESUME BUILDING WORKSHOP



On April 3, 2024, at 9:30 PM, a workshop was held for the students of the Chemical Department, facilitated by one of our esteemed alumni Jefy Jean Anuja Gladis. The main ideas discussed included the importance of flexibility in career goals, with an emphasis on the value of both online/research and industrial internships. Corporate Gurukul was recommended as a platform for research internships, and leveraging connections with seniors and alumni for industrial internships was advised. Networking, particularly via LinkedIn, was highlighted as crucial for showcasing interest and credibility. The significance of continuous projects aligned with internships, sophisticated mini projects, and the potential of converting these into publications was underscored, with project suggestions such as battery recycling, super capacitors, semiconductors, CO2 capture, and green hydrogen. She also suggested Post-graduation plans which included preparing for GATE and PSU exams, pursuing Master's degrees in India or abroad, and preparing for GRE and IELTS, with an emphasis on early preparation.

The importance of showcasing impact in resumes and tailoring cover letters to job descriptions was stressed, along with effective LinkedIn networking was very well explained by her. She also shared her personal inspiration and the importance of timing and perseverance. Students were asked to explore internship opportunities and effective networking along with early preparation for post-graduation exams, and faculty guidance in project selection and publication strategies. The workshop concluded with

gratitude to Ms. Jefy for her valuable insights and encouragement, and plans for follow-up sessions to support students further.





WEBINAR



On April 13, 2024, AIChE TKMCE and AIChE EPN joined forces to host a webinar that transcended borders, bringing together executive committee members from both chapters for an enriching exchange. This digital symposium served as a conduit for cultural immersion between India and Ecuador, offering a platform for the sharing of experiences, insights, and aspirations.

At the helm of the webinar was Akash S. Babu, President of AIChE TKMCE, whose opening address set the stage for an engaging dialogue. With a blend of eloquence and passion, he provided a glimpse into the multifaceted activities of their chapter, reflecting on past

achievements and outlining future endeavors. His words resonated with a sense of purpose, underscoring the commitment of AIChE TKMCE to excellence in engineering education and professional development. Following Akash's introduction, Vice President Ajoshn Jose and Secretary Athmaja DV took center stage, offering a comprehensive overview of TKM College of Engineering. Through meticulous detail and insightful commentary, they illuminated the academic landscape of the institution, showcasing its infrastructure, research initiatives, and extracurricular programs. Their presentation painted a vivid portrait of TKMCE as a hub of innovation and learning, poised at the forefront of engineering education.

But the webinar was not solely focused on academia; it was also a celebration of culture and heritage. Publicity Vice Chairperson Saniya Shaji took the audience on a captivating journey through India's rich tapestry of traditions and history. With evocative imagery and poignant anecdotes, she highlighted the vibrant diversity that defines the Indian subcontinent, from ancient civilizations to contemporary cultural expressions. Her presentation served as a testament to the enduring legacy of India's heritage, inviting participants to immerse themselves in its beauty and complexity. Adding depth to the cultural exchange, Technical Vice Chairperson Devi Chandana S. provided insights into the unique facets of Kerala, her home state. From its serene backwaters to its vibrant festivals, she offered a glimpse into the soul of Kerala, showcasing its natural beauty, cultural traditions, and culinary delights. Her presentation served as a bridge between India's past and present, inviting participants to explore the rich tapestry of Kerala's heritage.

As the virtual journey through India drew to a close, the spotlight shifted to Ecuador, with Miguel Llamuca, External Relations Director of AIChE EPN, taking the stage. With enthusiasm and fervor, he shared insights into their chapter's activities, offering a window into the dynamic landscape of engineering in Ecuador. But his presentation went beyond mere statistics; it was a celebration of Ecuador's rich cultural heritage, from its indigenous traditions to its vibrant arts scene. Through his words, participants were transported to the lush landscapes of the Andes, the pristine shores of the Galapagos Islands, and the bustling streets of Quito.

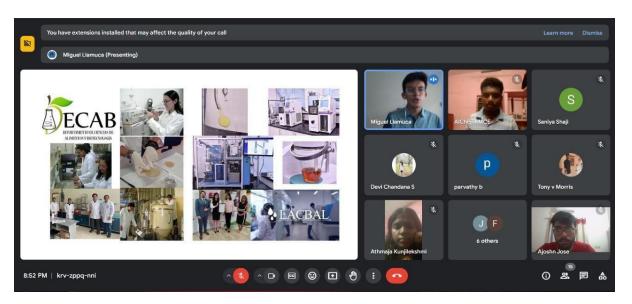
In addition to presentations, AIChE EPN organized a lively game session via Kahoot, infusing the webinar with an element of fun and interaction. This interactive segment fostered engagement and camaraderie among participants, further enhancing the overall experience.

In conclusion, the webinar served as a melting pot of ideas, perspectives, and experiences, providing a fertile ground for cross-cultural exchange and collaboration. It offered a glimpse into the rich tapestry of India and Ecuador, celebrating their cultural heritage and engineering prowess. As the digital curtains closed on this memorable event, participants were left with a renewed appreciation for the diversity of our world and the power of technology to connect us across continents and cultures. Moreover, AIChE EPN's pledge of support for future collaborative activities underscores the enduring bonds forged through this virtual encounter.









WEBINAR WITH AICHE-APUCARANA, BRAZIL



On May 19, 2024, AIChE TKMCE, in collaboration with AIChE Apucarana, orchestrated a collaborative webinar, drawing the participation of executive committee members from both chapters. This webinar was thoughtfully crafted to serve as a conduit for cultural exchange between India and Brazil, providing a platform for the sharing of chapter activities, insights, and experiences.

Setting the tone for the event, Akash S. Babu, President of AIChE TKMCE, delivered a succinct overview of their chapter's initiatives, encapsulating their commitment to excellence in engineering education and professional development. Following his introduction, Vice President Ajoshn Jose and Secretary Athmaja DV provided a detailed exposition on TKM College of Engineering, offering a comprehensive insight into the institution's academic landscape, research endeavors, and extracurricular pursuits. This was complemented by an enlightening discourse on India's rich cultural heritage and history, with Technical Vice Chairperson Devichandana S. shedding light on the unique characteristics of Kerala, her home state.

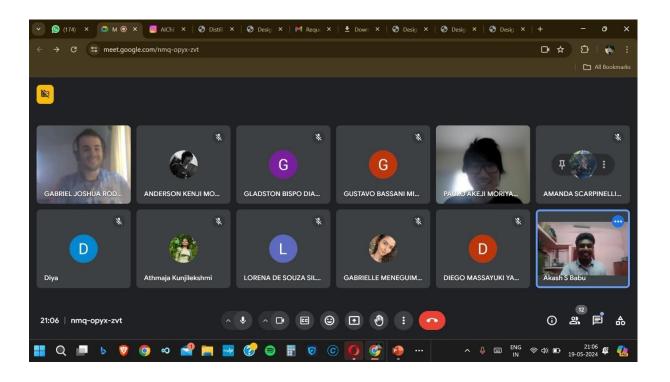
Representing AIChE Apucarana, Gabriel Joshua Rodrigues, the External Relations Director, contributed significantly by delineating their chapter's engagements and offering an engaging narrative on Brazil's historical background, cultural tapestry, and culinary traditions.

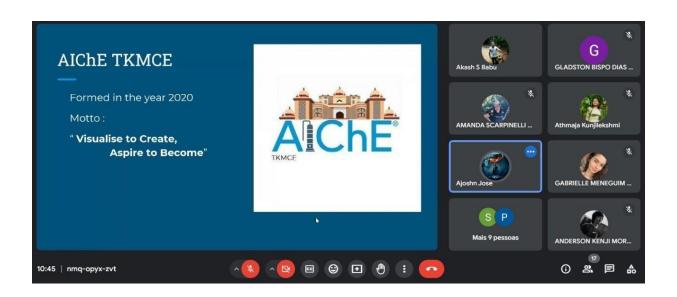
Additionally, Execom member Anderson Kenji provided insights into their chapter's ongoing activities and discussed the potential avenues for future collaborative endeavors. The dialogue also encompassed discussions on the scope of chemical engineering in both Brazil and India, enriching the exchange with perspectives on professional trajectories and industry landscapes.

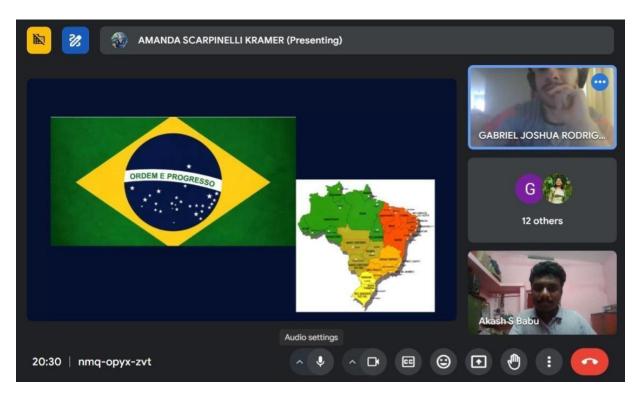
The webinar seamlessly blended informative sessions with engaging exchanges, fostering meaningful connections between students from both nations. It provided a fertile ground for the exchange of ideas, insights, and experiences, transcending geographical boundaries and

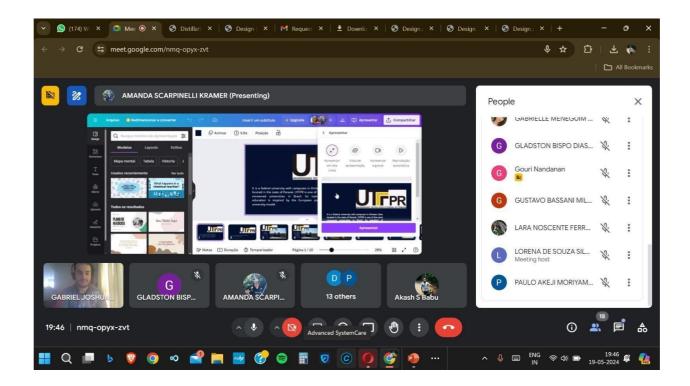
cultural differences. Participants were encouraged to actively participate, contributing to a vibrant dialogue that facilitated mutual learning and understanding. This collaborative initiative played a pivotal role in forging strong international bonds between AIChE chapters, laying the foundation for future collaborations and partnerships. By providing a platform for cross-cultural exchange and dialogue, the webinar not only enriched the academic experience of participants but also contributed to the cultivation of global perspectives and intercultural competence. Furthermore, the collaboration holds immense potential in enhancing the visibility and reach of both AIChE TKMCE and AIChE Apucarana, serving as a springboard for future publicity and informative events. By leveraging the synergies between the two chapters, opportunities for knowledge dissemination, professional development, and networking can be maximized, benefiting students, professionals, and the broader community alike.

In essence, the collaborative webinar epitomized the spirit of cooperation, camaraderie, and mutual respect, underscoring the transformative power of international collaboration in advancing the goals and objectives of AIChE chapters worldwide.









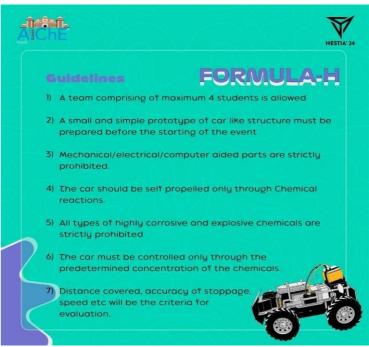


HESTIA'24 EVENTS

As a part of Hestia'24, TKM's National Level Technical Fest, AIChE organized 2 events-Formula-H, the Chem-e-Car competition and a Jeopardy.

FORMULA-H





The main objective of ChemE Car is to design and construct a car (roughly the size of a shoe box) that propels itself on a chemical reaction, stops itself on a chemical reaction, or both. The car must have the power to travel a specified distance and the versatility to hold different weights.

Here, In our event we'd conducted a small version of this chemical car competition. This competition included mainly 3stage's. The stage 1 is the maximum distance round, the stage 2 is the maximum speed of car and the last stage 3 is the accuracy round. In all these three stages the team with maximum point had got the prizes.

1st Prize - Sarath Manikandan
Ayisha Jawad
Muhammad Fayaz
Sunena P M
(TKM College of Engineering, Kollam)

2nd Prize - Dishna D

Aashna Saifudeen

Ameen O

Farseena Nazrin M K

(TKM College of Engineering, Kollam)

3rd Prize - Dhanish D Harikrishnan MJ Atharsh PR Benhur P Benny

(Govt. College of Engineering, Thrissur)





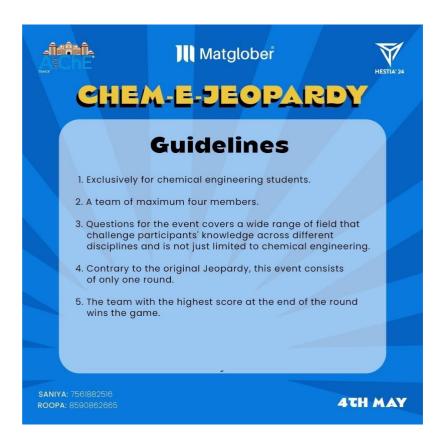






CHEM-E-JEOPARDY





On May 4, 2024, AIChETKMCEorganized Chem-E-Jeopardy at the seminarhall, starting at 5 pm. Fiveteamsparticipated, with two teamscomprising three members each and the remaining three teams consisting of fourmembers each. Theevent featured questions from five categories:

international affairs, sports, chemical engineering, global cuisine, and technological innovations. Each category had five questions of varying points and difficulty levels. The first team to choose a question was selected through a lot system. Once at earnwas chosen, they had the opportunity to select a question from any category. If they answered correctly, they earned the points; otherwise, the question was passed to another team. The event concluded at 7 pm and team with the highest points was declared the winner. Following the competition, prizes were distributed, and photographs were taken to commemorate the event's success. The event provided a platform for participants to demonstrate their knowledge and teamworks kills while engaging in friendly competition.







Taking a moment to reflect on the remarkable journey of the AIChE TKMCE Student Chapter over the past year, our chapter has made significant strides in fostering academic excellence, professional growth, and community engagement among our members.

Through a diverse array of events and initiatives, we have not only enhanced our technical knowledge but also developed essential skills in leadership, teamwork, and innovation. The success of our programs and activities is a testament to the hard work and dedication of our members, the guidance of our faculty advisor, and the support of the wider AIChE community.

Thank You.