



VIT<sup>®</sup>

Vellore Institute of Technology  
(Deemed to be University under section 3 of UGC Act, 1956)



UNRAVEL THE WORLD OF CHEMICAL ENGINEERING

**SRC**

Student Regional Conference

**STUDENT REGIONAL  
CONFERENCE**

9<sup>th</sup> - 11<sup>th</sup> September, 2022



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**SCHEME**

School of Chemical Engineering

**AIChE**   
The Global Home of Chemical Engineers



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Founded in 1984 as the Vellore Engineering College, a self-financing institution, Vellore Institute of Technology was conferred university status by the Ministry of Human Resources Development in 2001.

The University is headed by its founder and honourable Chancellor, Dr G. Viswanathan. VIT was established to provide quality education at par with international standards. It persistently seeks and adopts innovative methods to improve the quality consistently. Experienced and skilled teachers nurture the students at VIT. The international standards set at VIT in the field of teaching and research are just a testament to its relentless pursuit of excellence. The Memoranda of Understanding (MoU) with over 350+ top cadre international universities is a major strength, and provides for an exchange of students and faculty, encouraging joint research projects for their mutual benefit. Multiple research projects have been pursued by VITians at foreign universities, projecting high skill development, thus making VIT proud.





# SCHEME

## School of Chemical Engineering

The B.Tech programme imparts fundamentals of Chemical Engineering while simultaneously developing problem-solving capabilities through its multi-disciplinary curriculum. School of Chemical Engineering (SCHEME) at VIT University has been keen on its growth by incorporating the seeds of core Chemical Engineering principles in the young minds, from innovating, designing, optimizing, economizing to troubleshooting of myriads of industrial processes and research. The course structure provides an optimal mix of core and elective courses. Chemical Engineers help make the world easier, safer and comfortable for the human civilization to prosper.

# AIChE

## The Global Home of Chemical Engineers

The American Institute of Chemical Engineers (AIChE) is the world's leading organization for students and professionals in the field of chemical engineering. Established in 1910, and with currently over 60,000 members from 110 countries, AIChE Global provides a worldwide platform for aspiring minds to showcase their talents, and equips them with a vast wealth of resources and guidance, enabling the talented individuals to achieve success in their future endeavours.



The AIChE Student Chapter at VIT (AIChE-VIT) was founded in 2014. It aims to provide a platform for budding chemical engineers to get the required exposure and experience in various competitions across India and the world so that they can further develop their skills in the field of Chemical Engineering. Known to organize a myriad of events; from guest lectures to specialized software workshops, as well as quizzes and unique multi-round events, AIChE-VIT leaves no stone unturned in providing each of its members with a hands-on experience. Members also acquire guidance from industrialists and world experts providing opportunities to learn practical aspects and instill the abilities to overcome real-world challenges.



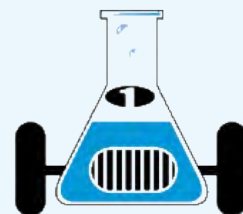


# **STUDENT REGIONAL CONFERENCE**

The Student Regional Conference (SRC) is an annually held event, hosted by one of the student chapters of the American Institute of Chemical Engineers (AIChE), in each of the 14 regions, based on topographical location. The intent of conducting SRC is to bring together various chapters to work under common interests, with the help of training workshops, competitive events and insightful seminars. It aims to provide a platform for budding chemical engineers to interact with each other, as well as experts from eminent organizations in the field, thus building essential workspace skills. It is the perfect opportunity for students to showcase their talents and understanding the various topics related to chemical engineering. The winners in each category of the 14 regions get to compete against each other at the Annual Student Conference (ASC) organised by AIChE Global in the USA.

## **Why SRC?**

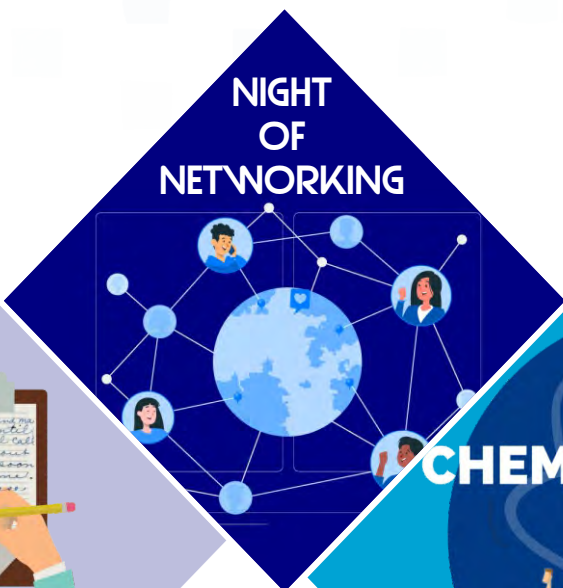
Bringing together more than 400+ budding chemical engineers, the Regional Student Conference is one of the most prestigious events for astute and ardent undergraduate students. It provides a great platform for aspiring chemical engineers to not only polish their skill set in the field but also assist in the enhancement of their overall personality with qualities like decision making, relationship building and time management. AIChE members from eminent universities across the Southern Asia Region are expected to participate in this grand event.



**AIChE**  
**Chem-E-Car**  
**Competition®**



# EVENTS



## 1. AIChE Chem-E-Car Competition



The flagship event of AIChE-Global Chem-E-Car involves the development and construction of a car with a chemical propulsion and self limiting stopping reaction with the aim of sustainable development in transportation. The load needed to be carried by the car as well as the exact distance the car needs to cover in a straight line before stopping is only announced a few hours before the competition starts. Hence, the participants have to use their imagination as well as their technical skills to emerge victorious in this extremely challenging competition. The winners of each region contend against each other at the Chem-E-Car Competition Finals at the Annual Student Conference (ASC) held in the USA.

**The event consists of three rounds:**

**a) Engineering Design Package Document Submission:** Each team will need to submit a document comprising all necessary details about their car. This will be done 5 weeks prior to the event.

**b) Chem-E-Car Safety Check:** All the cars will undergo a safety check done by the Regional Safety Coordinator of AIChE Global and the Safety Coordinator of AIChE-VIT, to prevent any hazards.

**c) Chem-E-Car Competition:** Each team will get to run their car twice along the track, and the best run will be considered. The team whose car covers the longest distance will be declared the winner.



## 2. AIChE K-12 STEM Outreach Competition



This event aims to create a platform for the participants to put their inquisitive minds to work and understand the power of chemical engineering in daily life. With the K12 Outreach program, participating teams must select the age group of students they wish to teach and then present a complicated topic in the form of a unique and interesting experiment which makes the children not only understand the concepts clearly but also incline them into performing the experiments consequently opening the doors of creativity for the children.

The modules can take the form of discussions, demonstrations or experiments, and can be made regarding any concept within the range of STEM, but should ideally be related to chemical engineering. Each module will have both an experiential component and a written component. The event is divided into four age groups:

- a) Kindergarten- 2<sup>nd</sup> grade
- b) 3<sup>rd</sup> – 5<sup>th</sup> grade
- c) 6<sup>th</sup> – 8<sup>th</sup> grade
- d) 9<sup>th</sup> – 12<sup>th</sup> grade

**Causes of Surface tension**

A molecule is tugged in all directions equally by neighboring liquid molecules due to cohesive forces, resulting in a net force of zero. Because the molecules near the surface are not surrounded by identical molecules on all sides, they are pushed inward causing internal pressure resulting in the liquid surfaces to compress to the smallest possible area. Due to the cohesive structure of water molecules, there is also a tension parallel to the surface that will resist an external force.

**AIChE**  
VELLORE INSTITUTE OF TECHNOLOGY

Participants in the meeting:

- Nimish Khandel...
- Avin Saha
- Anjali Ekka 21BC...
- Anvesha Datta
- Vivek AK
- Krithika Venkate...
- Aditi Sridhar
- Aman Shrivastava
- Ayushi Shrivasta...
- Tapur Joshi
- VIT Vellore Institute of Technology





## 3.

## ChemE Jeopardy



It is an exciting competition based on the popular game show jeopardy, but with an increased focus on topics related to Chemical Engineering. The participants will be given a variety of topics to choose from, consisting of scientific clues, for which they must phrase their responses in the form of questions. This event will be particularly helpful for expanding knowledge about the standard chemical reactions and processes involved in the field.

**The event consists of four rounds:**

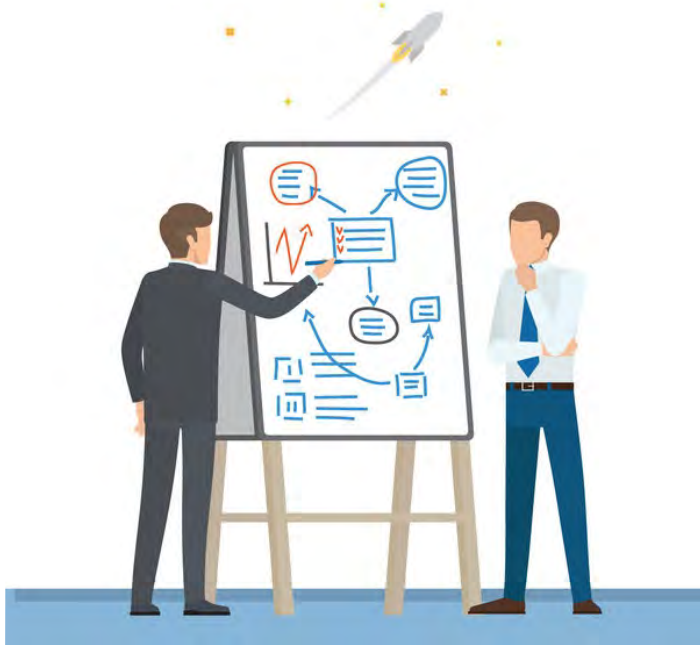
- 1) Preliminary Round:** Top 12 teams will be selected out of all the participating teams, based on their performance in a written test. The top 3 teams will qualify for the Semi-Finals.
- 2) Qualifiers:** After vigorous rounds of Single and Final Jeopardy, 9 teams, including the top 3 teams of Preliminary Round, will proceed to the Semi-finals.
- 3) Semi-finals:** The 9 qualified teams will be divided into groups of 3 each and the winners of each group will go neck to neck in the Regional Championship Game.
- 4) Finals:** Winners of ChemE Jeopardy 2022 for Indian Region will be announced after rounds of Single, Final and Double Jeopardy.

## 4. Paper and Poster Presentation Competition



Whether we speak about going for master's abroad or designing and solving hurdles in chemical processes in industrial jobs, research plays a very important role in the field of chemical engineering. Keeping the same in mind, we welcome undergraduate students and analysts from across the region to come and present their novel ideas before the jury in the form of a banner, a paper introduction and an abstract. The subject of the papers and posters is dependent on the participants, but mainly includes focussing on recent advances in numerous branches of chemical engineering in form of research and review papers.

Exposure to a competition of this sort will hone the skills of the young, analytical and creative minds in the best possible manner, and will offer a real-world experience for them.



## 5. TECHTONIC



An intriguing multi-round competition resembling a relay race, however, with an added twist. The team participates in the first and second rounds according to the round requirements. The power ups accumulated in each round by member(s) of a team are passed onto the next round, similar to “passing the buck” in a relay. For the final twist, the last round i.e., the third round demands the whole team’s participation together. An opportunity to test true team work at its best at each level of the event!

**The event consists of three rounds:**

- 1) Solv'em(ts):** A hands-on experimental round, where one team member from each team comes forward to complete a series of tasks assigned to them. The first three participants to finish acquire power-ups to be passed on to the second round.
- 2) Words Brawl:** Based on the popular word game show, Just A Minute (JAM), this round will have two members from each team (excluding the member who already participated), one speaker and one spotter. Both team members will get equal chances to speak for a span of 45 seconds each on pictures based on Chemical Engineering field.
- 3) Tackle-it! :** The final round with all the members of a team participating together in a technically challenging auction.

## 6. Presidents and ESC meet



The initiatives, conference involvement, opportunities and challenges faced by all the student chapters in that particular region are discussed and in addition to the same, the next host of the Student Regional Conference is decided.



# OTHER EVENTS

## Inauguration Ceremony

The Regional Student Conference officially begins with this grand ceremony. It gives our professors, deans, industrial guests, as well as our respected AIChE global members and sponsors a platform to put forth their thoughts and experiences in front of the AIChE members from all over the Indian subcontinent.

## Night of Networking

A fun-filled night, just for interacting with fellow AIChE members from different universities. Participants will get to know each other better through a series of exciting activities, making it a memorable session.

## Cultural Night

This event allows participants to sit back and witness the talent of students in various fields of art. They also get to interact and mingle with their fellow AIChE members from other universities.

## Workshop

The participants get a chance to delve deeper into the nuances of the chemical industry. The hands-on training exponentially enhances their problem solving and critical thinking abilities. Overall, this event gives them immense exposure which will prove to be fruitful for students in the future.

## Closing Ceremony

The three-day event culminates with this magnanimous ceremony, where the winners of each competition are announced, followed by the prize distribution ceremony.

and many more...

# ACHIEVEMENTS

## Outstanding Chapter Award

AIChE-VIT Student Chapter has been awarded the Outstanding Student Chapter award for **6 consecutive years** from 2015-16 to 2020-21.



## Chem-E-Car

The Chem-E-Car team of AIChE-VIT was ranked first in the Chem-E-Car competition at AIChE Student Regional Conference in 2018 and represented AIChE-VIT (Vellore) at the International Chem-E-Car competition held in Pittsburg, USA.

## K-12 STEM Outreach Competition

AIChE-VIT's team comprising **Manali Mahendra Barve**, **Trisha Daftari** and **Urva Dave** bagged second place in Undergraduate category and first place in 3rd to 5th grade category, in the K-12 STEM Outreach Competition at the 2021 Annual Student Conference.



## ChemE Jeopardy and ChemE Safe

Teams from AIChE-VIT won the ChemE Jeopardy as well as the Chem-E-Safe competitions during RSC-MIT Pune (2019) and represented India in the Annual Student Conference (ASC), Orlando.

## Freshman Recognition Award

**Jayyant Kakkar (2020-2021)** and **Shaily Gupta (2019-2020)** won this award for being the most active member of the club and immensely contributing to the chapter in their freshman year.



## Sophomore Academic Excellence Award

**Jaydev Zaveri (2020-2021)** and **Eleena Banerjee (2019-2020)** received this award for their highest scholastic point average during their Freshman and Sophomore years.





# SRC

Student Regional Conference

## STUDENT REGIONAL CONFERENCE



9<sup>th</sup> - 11<sup>th</sup> September, 2022

**CONTACT**

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