

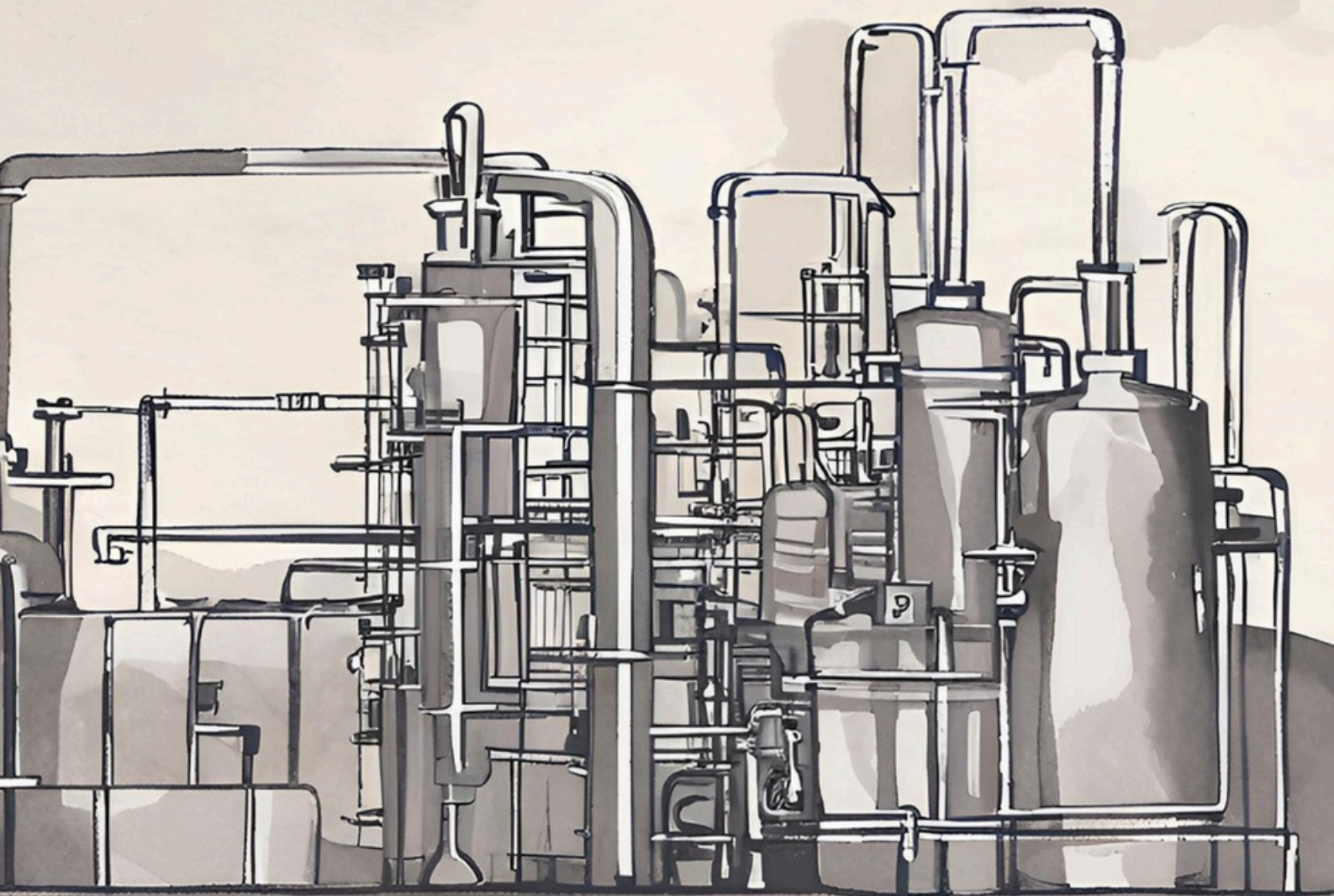


CHAITANYA BHARATHI
INSTITUTE OF TECHNOLOGY
Autonomous Institute | Affiliated to Osmania University

ChemElite ~ 2022 - 2023

Bridging Science and Sustainability

Department of Chemical Engineering



Vision & Mission of the Institute

Institute Vision

To be a center of excellence in technical education and research

Institute Mission

To address the emerging needs through quality technical education and advanced research

Department Vision & Mission

Department Vision

To become the most sought centre of excellence engaged in training and shaping students as professionals for higher education and process industries both in India and abroad and allow the students to do R & D projects and publish same in the reputed journals.

Department Mission

- Imparting contemporary technical education and training manpower.
- To create a skilled human resource talent pool.
- To serve and manage the process industries globally with a sense of responsibility towards society and the environment.





ChemElite: Showcasing the Spirit of Chemical Engineering

ChemElite is the official newsletter of the Chemical Engineering Department, launched in 2021 to celebrate its vibrant community and accomplishments. Each issue provides a glimpse into the department's achievements, from academic and research milestones to industrial collaborations and student initiatives.

Designed to foster engagement, ChemElite features student projects, alumni stories, industry partnerships, and departmental events, offering a well-rounded view of the department's dynamic environment. The newsletter is curated by a dedicated editorial board comprising faculty and students, ensuring each edition reflects the department's commitment to innovation, excellence, and collaboration.

By sharing its achievements and vision, ChemElite strengthens the department's presence within the institute and beyond, building connections within its community and the wider professional world.

Editorial Team

The editorial board brings together a talented team of faculty and students:

- Chief Editors: Prof. M. Mukunda Vani & Dr. B. Ganesh
- Faculty Editors: Dr. P.V. Naga Prapura, Dr. M. Mallaiah, Sri. I. Bala Krishna, Dr. P. Madhuri, Dr. K. Prasad Babu, Dr. Prasanna Rani R., Dr. BVS Praveen, Dr. Raj Kumar Verma
- Chief Student Editors: Mr. Dhruv Gollapudi, Mr. Lingala Eswaraditya Reddy, Mr. Sheri Sai Kumar, Mr. E.G. Tanishq

ChemElite continues to serve as a bridge between the department's achievements and its aspirations, connecting its members and inspiring excellence at every step.



Principal's Message

It gives me immense pleasure to address the Department of Chemical Engineering through this newsletter. Over the past 44 years, CBIT has steadfastly strived to deliver quality education of international standards. With a legacy of nurturing engineering excellence, I am confident that our students, under the mentorship of our dedicated faculty, will emerge as skilled professionals ready to address the challenges of Industry 4.0 and the disruptions reshaping every industry.



CBIT prides itself on its strong industry partnerships. Leading organizations have established labs and collaborated on developmental projects within our campus, ensuring our students are exposed to real-world applications. Our curriculum is meticulously designed to meet industry demands by adhering to the AICTE Model Curriculum, the National Education Policy (NEP) 2020, and Outcome-Based Education (OBE). This structure fosters creative thinking, innovation, and the freedom to explore, aligning students with modern technological advancements.

To enhance employability, CBIT offers robust placement training and skill development programs. I encourage students to make the most of these opportunities and aim for their dream careers. Additionally, our well-established Entrepreneurship Development Centre (EDC) provides a platform for students to hone their entrepreneurial skills, contribute to the nation's progress, and embody our motto, "Swayam Tejaswin Bhava."

We have also cultivated a thriving ecosystem for startups and innovation. Through the guidance of faculty and industry experts, students are motivated to engage in research, innovation, patenting, and product development, focusing on sustainable technologies. These efforts underscore our commitment to fostering a culture of ideation and implementation.

CBIT emphasizes holistic development through a wide range of co-curricular and extracurricular activities. With over 54 active clubs, our students can explore their talents beyond academics, cultivating well-rounded personalities and responsible citizenship. I strongly encourage participation in sports, arts, leadership initiatives, and skill development programs, which add vibrancy and purpose to campus life.

As a proponent of pragmatic education, I firmly believe in the philosophy of "learning by doing." CBIT promotes experiential, project-based, and problem-based learning approaches to achieve the objectives of OBE. My vision, encapsulated in the "5Ps" — Placements, Publications, Projects, Patents, and Participatory Administration — serves as the cornerstone of our sustained excellence on national and international platforms.

At CBIT, we believe that the pursuit of excellence is a continuous journey. Our institute has contributed immensely to society by producing renowned technocrats, successful entrepreneurs, innovative scientists, and competent leaders. I urge all stakeholders to join hands in taking this institution to even greater heights.

Let us continue to innovate, inspire, and transform lives. Together, we can shape a brighter future for the Department of Chemical Engineering and CBIT as a whole.

Warm regards,
Dr. C.V. Narasimulu
Principal, CBIT



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HOD's Message

Greetings to all readers of the Chemical Engineering Department Newsletter!

The Department of Chemical Engineering at Chaitanya Bharathi Institute of Technology (CBIT), established in 1995, has been at the forefront of providing quality education and preparing students to excel in the ever-evolving field of chemical engineering. With multiple accreditations from the National Board of Accreditation (NBA), our department has consistently demonstrated its commitment to excellence in academics, research, and innovation.



Chemical engineering is a dynamic and interdisciplinary field that combines principles of chemistry, physics, biology, and mathematics to develop sustainable solutions for society's needs. From designing efficient industrial processes to contributing to advancements in biotechnology, nanotechnology, energy, and pharmaceuticals, chemical engineers play a vital role in shaping a better future.

At CBIT, we aim to nurture engineers who are not only technically proficient but also creative, innovative, and equipped with problem-solving skills. Our undergraduate program offers both regular and honors degrees, along with the flexibility for students to pursue a Minor degree in other fields. This holistic approach to education ensures our graduates are well-prepared to address real-world challenges and contribute meaningfully to industry and research.

The department has always been proud of its strong ties with industry and academia. Our alumni have gone on to work in prestigious organizations such as Pfizer, Sanofi, and Takeda Pharmaceuticals, and many have pursued higher education and research opportunities globally. This success is a testament to the rigorous training and support provided by our highly qualified faculty, whose expertise spans diverse areas of chemical engineering.

In line with our motto, "We bring Chemical Engineering into Life," we encourage students to actively engage in research, innovation, and experiential learning. The department's focus on sustainable technologies, digitalization, and interdisciplinary collaboration ensures that our students remain at the cutting edge of this ever-expanding field.

Chemical engineering at CBIT is not just about academics—it's about holistic development. We encourage our students to participate in technical symposiums, workshops, and extracurricular activities that foster leadership, teamwork, and creativity. Our alumni network further strengthens the department, providing mentorship and opportunities for current students to connect with industry leaders.

I invite you to stay engaged with the Department of Chemical Engineering through this newsletter and welcome you to participate in our initiatives and events. Together, let us continue to advance the boundaries of chemical engineering and make a lasting impact on society.

Sincere regards,
Dr. M. Mukunda Vani
Head of Department
Chemical Engineering, CBIT



EDITOR'S MESSAGE

Dear Readers,

It is my privilege to present the latest edition of the Chemical Engineering Department Newsletter, a platform that celebrates the achievements, events, and innovations of our vibrant community at Chaitanya Bharathi Institute of Technology (CBIT).



Chemical engineering is a field of immense potential, addressing critical challenges in industries such as energy, environment, healthcare, and materials. This newsletter aims to showcase the remarkable contributions of our students and faculty in advancing these areas through academic excellence, research, and industry collaborations.

As the Coordinator of this newsletter, I am inspired by the dedication and creativity of our department. Each article, feature, and update is a reflection of the hard work and enthusiasm that define the spirit of CBIT's Chemical Engineering Department. From student projects and faculty research to industrial partnerships and alumni success stories, this newsletter serves as a bridge connecting our department to a broader audience.

I encourage everyone to actively engage with the content, celebrate the accomplishments of our department, and contribute to its ongoing success. Together, let us continue to push the boundaries of innovation and bring the transformative power of chemical engineering to life.

Warm regards,

Dr. B. Ganesh

Faculty and Newsletter Coordinator
Department of Chemical Engineering, CBIT



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IICHE - INTER-COLLEGE COMPETITIONS

13-04-2023


INDIAN INSTITUTE OF CHEMICAL ENGINEERS
HYDERABAD REGIONAL CENTRE
611, La' Build, Lingapur House, HimayatNagar, Hyderabad-500029
email: iiche.hrc@gmail.com ; website: www.iichehrc.org.


INVITATION FOR INTER-COLLEGE COMPETITIONS

Organized by



Chaitanya Bharathi Institute of Technology (A)
Department of Chemical Engineering
In association with
Indian Institute of Chemical Engineers –
Hyderabad Regional Centre (IICHE-HRC)

Guest lecture by



Dr. Sanjay Bhardwaj
Head-CTAT, ARCI HYD.

Date:
13th April, 2023

Venue:
CBIT Assembly hall

Topic : Innovation Ecosystem in India

PROGRAM SCHEDULE	
Time	Program details
10:00 AM	Inaugural session
10:15 AM	Lighting of the lamp & Invocation
10:15-10:20	About the event by Dr.M.Mukunda Vani HOD Chemical Engg, CBIT.
10:20-10:30	Address by the Principal, CBIT.
10:30-10:40	Address by Dr. Sanjay Bhardwaj Chairman, IICHE-HRC.
10:40-10:50	Felicitation to the EC members
10:50-11:00	Vote of thanks by Dr.K.Prasad Babu, Coordinator- IICHE-CBIT Student chapter
11:00-11:30	Tea break
11:30-12:30	Guest lecture by Dr. Sanjay Bhardwaj, Head-CTAT, ARCI HYD.
12:30-01:30	Lunch
01:30-02:30	Essay writing & Elocution competitions
02:30-03:30	Technical quiz, Model making/ Modelling and simulation
03:30-04:00	Valedictory session & National Anthem

The Department of Chemical Engineering organized an Inter-College Competition in collaboration with the Indian Institute of Chemical Engineers (IICHE) – Hyderabad Regional Centre. The event attracted participants from over six colleges, both within and outside Hyderabad.

The competition began at 10:00 AM with an inaugural session, starting with the traditional lamp-lighting ceremony accompanied by an invocation song performed by Sai Sriya, a third-year Chemical Engineering student from CBIT.

Following this, the dignitaries delivered the welcome addresses. Dr. M. Mukunda Vani, Head of the Chemical Engineering Department, CBIT, provided an overview of the competition and its objectives. Dr. N.L.N. Reddy, Head of Placements at CBIT, extended a warm welcome to the participants and faculty members. The Principal of CBIT emphasized the significance of student chapters and how they serve as platforms for enhancing knowledge and skills.

The inaugural session concluded with an address by Dr. Sanjay Bhardwaj, Chairman of IICHE-HRC, who highlighted the purpose and importance of the competitions.



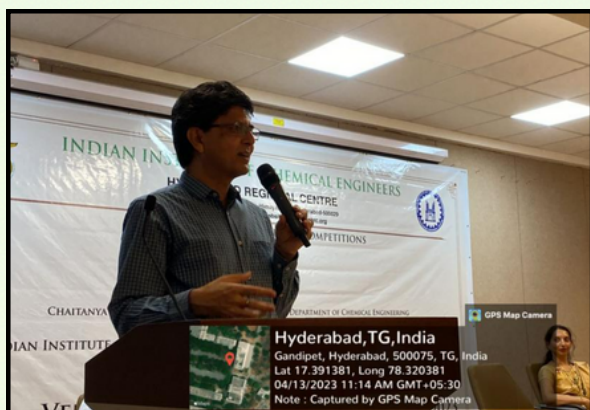
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Dr. M. Mukunda Vani, Head of the Chemical Engineering Department, CBIT, provided an overview of the competition and its objectives.

Dr. N.L.N. Reddy, Head of Placements at CBIT, extended a warm welcome to the participants and faculty members.



The guest lecture by Dr. Sanjay Bhardwaj Chairman, IICChE-HRC was about Innovation Ecosystem in India. The lecture delivered some valuable outputs to the audience on how the whole innovation ecosystem in India works.



The Principal (Mr. P. Ravinder Reddy) delivered the welcome address and addressed about the importance of different student chapters and how student can learn more and expand his/her knowledge.



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After the welcoming address of the dignitaries Principal CBIT along with Dr.NLN Reddy had felicitated all the EC members .Which was followed by a Vote of thanks by Dr.K.Prasad Babu, Coordinator- IICHe-CBIT Student chapter which marked as the end of the inaugural session. Later a 10 min of High tea break was followed.





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After the tea break the guest lecture by Dr. Sanjay Bhardwaj Chairman, IICHE-HRC on the topic Innovation Ecosystem in India was commenced. The lecture delivered some valuable outputs to the audience on how the whole innovation ecosystem in India works. The session concluded followed by lunch.



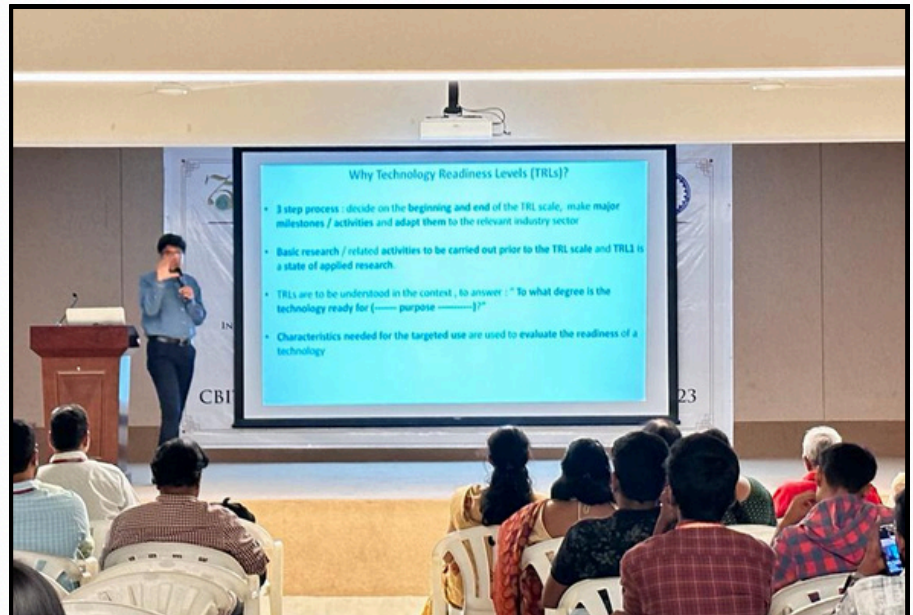
Hyderabad, TG, India

Gandipet, Hyderabad, 500075, TG, India

Lat 17.391402, Long 78.320424

04/13/2023 11:30 AM GMT+05:30

Note : Captured by GPS Map Camera



Post Lunch the inter-college competitions had begun in which participants actively took part in all the competitions which concluded the Inter-College Competitions.

IN THE NEWS !

IICHe – HRC -INTER-COLLEGE COMPETITIONS

DECCAN NEWS SERVICE
HYDERABAD

Indian Institute of Chemical Engineers – Hyderabad Regional Centre (IICHe HRC) in collaboration with Department of Chemical Engineering, Chaitanya Bharathi Institute of Technology, Hyderabad has organized Inter-College Competitions 2023. The Chief guest for the programme is Dr. Sanjay Bhardwaj, Head-CTAT, ARCI, HYD and Chairman of IICHe – HRC. Senior HRC members



graced the occasion along with Principal Dr.P. Ravinder Reddy .The Chief guest deliv-

ered a lecture on "Innovation Ecosystem in India". Chemical Engineering students from 9 colleges namely OUCT, NTU, IIT Basara, BVRRIT, BITS Pilani, Hyderabad campus, NIT Warangal and CBIT have actively participated and showcased their talent in different competitions like Model making, Technical quiz, Essay writing and Elocution. The senior HRC members judged the competitions. The programme was chaired by Dr. Mukunda Vani and coordinated by Dr. K. Prasad Babu along with faculty of the Department.



నూతన ఆవిష్కరణ అనేవి మన జీవన విధానం

మెరుగుపరచడానికి ఎంతో అవసరం:డాక్టర్ సంజయ్ భరద్వాజ్.

(ప్రణావినితీర్తి, (మొహరీవట్టం)

జరిగియున్న విషయాలపై అధ్యక్షులు ప్రశ్నలు చేసి, సమాఖ్య అధ్యక్షులు సమాధానాలు ఇచ్చారు. సమాఖ్య అధ్యక్షులు ప్రశ్నలు చేసి, సమాఖ్య అధ్యక్షులు సమాధానాలు ఇచ్చారు.



విద్యార్థులు మోడల్
వ్యాస రచన అలా
గోడలలో పాఠ్యాన్ని
అతిథిగా ఇండియన్
ఇంజనీర్స్, సైదరాబాద్
కేర్ సంఘం భరద్వా
మే ఇన్ ఇండియా అం
.దాక్టర్ భరద్వా
పుస్తక అనేది మ

తమ విధానం మెరుగుపరచడానికి ఎంతో ఆవదనం. వివాదాల్లో ఆలోచనలో నడుపుతుంటేగా రుపాసించినంతగా, అభివృద్ధి చేయడానికి, మనము పరిగించినంతగా మన దగ్గర ఉన్నా మనము లాల్ ఆవదనం. నమిస్తూ దీనిని 'జాన్మోచేమే' ఎతోనీమే' అని అంటారు. ఈ కావ్యములో తలాళాళ ప్రసిద్ధిపాలే ప్రాసినే న. రువీందర్ రెడ్డి మహాకవిగా, ప్రస్తుత కాలంలో కవిగా అంతటింగీ యొక్క పాత గురువు

మరియు నీవిదాని కళాశాల లో గాని వివిధ అంశాల
జాతీయత, ఎన్నోసార్లు అతరం అంశాలను
సాక్షాత్తులు గురుని వివరించారు. ఈ
కార్యక్రమాలలో కెమెరా అంశాలలో విభాగంలోని
దాని ముకుంద వాటి అభివృద్ధి మహానా.
సమస్యనుగత గా దాని కె. ప్రసాదానా, దాని
నాగ ప్రభుత్వ, దాని గోదానీ పాట అతరం
అభివృద్ధి, విద్యానా పాటనా.





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Industrial Visit to Nuclear Fuel Complex – 4th April 2023

On April 4th, 2023, 55 third and fourth-year Chemical Engineering students, along with faculty coordinators Dr. M. Mallaiah, Sri. I. Balakrishna, and Dr. P. Madhuri from CBIT Engineering College, visited the esteemed Nuclear Fuel Complex (NFC) in Hyderabad. Prof. M. Mukunda Vani, HOD of Chemical Engineering, coordinated the visit.

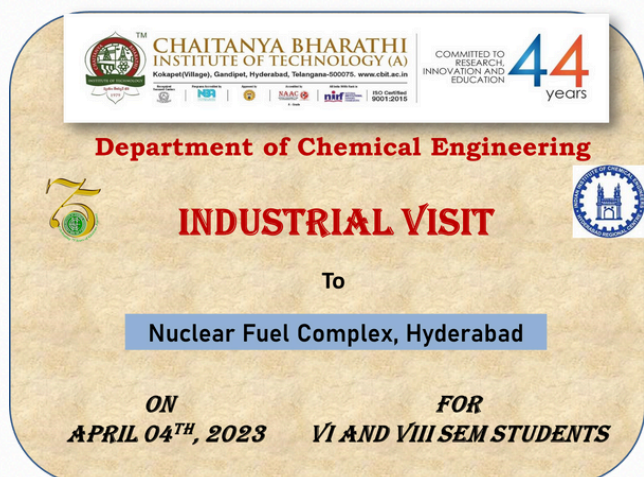
NFC is a unique facility in India that manufactures natural and enriched uranium fuel, zirconium alloy cladding, and reactor core components all under one roof. It is the only organization in India that meets the fuel requirements of nuclear power reactors.

The objective of the visit was to offer students insights into the processing and enriching operations of nuclear fuels. During the visit, students were exposed to key chemical processing units, enhancing their theoretical knowledge and giving them a first-hand experience of working in a chemical process plant environment.

Industry experts Mr. Vasudev Rao (DM, HRDD) and Mr. Srinivas (SM, HRD) provided detailed explanations of important processes, including:

- Jaw crushing of zirconium sponge
- Calcination process
- Precipitation process
- Sieving operations
- Vacuum distillation and chlorination processes

This visit was invaluable in bridging the gap between theoretical learning and practical application, particularly in areas related to design and operation in chemical engineering.





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On 14th July 2023, 40 second-year Chemical Engineering students from CBIT, accompanied by faculty coordinators Dr. M. Mukunda Vani, Dr. P. Madhuri, and Dr. K. Prasad Babu, visited the Indian Institute of Chemical Technology (CSIR-IICT), Hyderabad. CSIR-IICT conducts research in chemistry, biochemistry, bioinformatics, chemical engineering, and contributes to industrial and economic development.

The visit aimed to give students insights into process design and technology development in areas such as organic intermediates, fine chemicals, and polymers. The students gained valuable knowledge, particularly about analytical instruments, including Mass Spectrometry (MS), High-Performance Liquid Chromatography (HPLC), and Nuclear Magnetic Resonance (NMR). These instruments are essential for analyzing and characterizing compounds.

Students also explored the National MOL Bank, where Dr. Naveen guided them through state-of-the-art facilities for long-term compound storage. The visit helped students connect theoretical knowledge with practical applications, particularly in analysis, design, and operation.



INDUSTRIAL VISIT

DECCAN NEWS SERVICE
HYDERABAD

Chemical Engineering students of CBIT along with three faculty coordinators Dr. M. Mallaih, Sri. I. Balakrishna, Dr. P. Madhuri have visited Nuclear Fuel Complex located at ECIL Hyderabad on 4th April 2023. Prof. M. Mukunda Vani, HOD, Chemical Engg has coordinated the visit. NFC is the only organization in India which caters to the fuel requirements of nuclear power reactors. Students have visited Industry for gaining a better understanding of the key elements implicitly emphasized on various Nu-

clear fuels processing and enriching operations. The industry expertise Mr. Vasudev Rao, DM, HRDD and Mr. Srinivas, SM (HRD) have explained the students elaboratively, some of the important unit operations & processes such as: Jaw crushing of zirconium sponge, Calcination process, Precipitation process, Sieving operations, Vacuum distillation process and chlorination process. The major outcome of this visit is that, it helped the students to relate their theoretical knowledge with practical aspects of their study covering the curriculum related to design and operation.



పారిశ్రామిక సందర్శన సిబిఐటి కెమికల్ ఇంజనీరింగ్ విద్యార్థులు.

(ప్రజావినికిడి, మెహదీపట్నం):

సిబిఐటి కెమికల్ ఇంజనీరింగ్ విద్యార్థులు మరియు డాక్టర్ ఎమ్ మల్లయ్య, శ్రీ. ఐ బాలకృష్ణ, మరియు డా.పి.మాధురి హైదరాబాద్ ఇన్స్టిట్యూట్ ఆఫ్ టెక్నాలజీలో ఉన్న స్టూడెంట్స్ ఫ్యూయల్ కాంప్లెక్స్ ని ఈ మంగళవారం రోజు సందర్శించారు. కెమికల్ ఇంజనీర్ విభాగాధిపతి ప్రొఫెసర్ ఎమ్ ముకుంద వాణి ఈ సందర్శనను సమన్వయం చేసారు. భారతదేశంలో అణు విద్యుత్ రియాక్టర్ల ఇంధన అవసరాలను తీర్చే ఏకైక సంస్థ ఎన్ ఎఫ్ సి.వివిధ అణు ఇంధనాల ప్రాసెసింగ్ మరియు సుసంపన్నమైన కార్యకలాపాలపై అంతర్దీనంగా ముఖ్య అంశాల గురించి మెరుగైన అవగాహన పొందడానికి విద్యార్థులు పరిశ్రమను సందర్శించారు. పరిశ్రమ నిపుణుడు శ్రీ వాసుదేవ్ రావు, డిఎమ్, హెచ్ ఆర్ డిడి మరియు శ్రీ శ్రీనివాస్, ఎస్ ఎమ్ - హెచ్ ఆర్ ఆర్ విద్యార్థులకు విపులంగా వివరించారు, కొన్ని ముఖ్యమైన యూనిట్ కార్యకలాపాలు %౬౫ ప్రక్రియలు: జిర్కోనియం స్పాంజ్ యొక్క దవడ అణిచివేత, గణన ప్రక్రియ, అవపాతం ప్రక్రియ, జలైద అవరేషన్లు, వాక్యూమ్ స్వేదనం ప్రక్రియ మరియు క్లోరినేషన్ ప్రక్రియ గురించి వివరించారు. ఈ సందర్శన ధ్వారా విద్యార్థులు సైద్ధాంతిక పరిజ్ఞానాన్ని వారి అధ్యయనం యొక్క ఆచరణాత్మక అంశాలతో డిజైన్ మరియు ఆపరేషన్స్ సంబంధించిన అంశాలు తెలుసుకున్నారు.

**B.Tech VI & VIII Sem Students along with HOD, Chemical Engg & Faculty Members
at CBIT Campus for NFC Industrial Visit**



CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY

Autonomous Institute | Affiliated to Osmania University

Visit to CIPET-Hyderabad: Industrial Exposure to Plastic Engineering

Number of Students: 47

Faculty Accompanied: 3 (Dr. Naga Prapurna, Sri. I. Bala Krishna, Dr. Prasanna Rani R)

Staff Accompanied: 1 (Mr. Raju – Attender)

Faculty Coordinators: Prof. Mukunda Vani M, Dr. Prasanna Rani R

Student Coordinators: Mr. Anvith Reddy, Mr. Vishnu Revanth Reddy, Ms. Srinika

Introduction and Objective

On March 16, 2023, 47 Chemical Engineering students from CBIT visited the Central Institute of Plastics Engineering & Technology (CIPET) in Hyderabad. The visit was part of the curriculum designed to provide practical exposure to the process industries, enhancing students' academic understanding.

Details of the Visit :

The students were introduced to various testing machines used to assess the quality and properties of plastics. Some notable equipment demonstrated included:

1. Migration Test: Measures migration of harmful substances from plastics.
2. Toxicity Tester: Assesses the toxicity of plastics.
3. Oxygen Index: Measures the flammability of plastics.
4. Differential Scanning Calorimetry (DSC): Analyzes thermal behavior of plastics.
5. Impact Strength Tester: Evaluates impact resistance of plastics.
6. UV Weatherometer: Simulates weathering conditions to test UV radiation effects.
7. Atomic Absorption Spectrometer (AAS): Analyzes chemical composition of plastics.
8. Thermogravimetric Analyzer (TGA): Measures thermal stability of plastics.
9. Muffle Furnace: Used for high-temperature applications like sintering and ashing.
10. Spread of Flame Test: Determines flame propagation speed across materials.
11. Universal Testing Machine: Tests mechanical properties like tensile and compression strength.
12. Computerized HDT/VDT Tester: Measures Heat Deflection and Vicat Softening Temperatures.
13. Rockwell Hardness Tester: Assesses hardness of plastics.
14. Oil Bath: Heats samples to a consistent temperature in liquid media.
15. Hot Air Oven: Heats materials to a constant temperature in dry air.





Processing Techniques

The students observed various plastic processing methods, including:

1. Compression Moulding: Creates small to medium plastic items by heating and compressing material in a mould.
2. Rotational Moulding: Produces large-scale items like tanks and containers through heating and rotation.
3. Extrusion Process: Forces plastic through a die to create continuous cross-section items like pipes.
4. Injection Moulding: Injects molten plastic into a mould to form various items.
5. Blow Moulding: Inflates a heated plastic parison inside a mould to create hollow items like bottles.

Testing Instruments

Additionally, various tools used for physico-mechanical analysis of plastics were shown, including:

1. Analogical Pendulum: Measures impact resistance of plastics.
2. Density Measurement Tools: Assesses the density of polymers.
3. Melt Flow Index: Evaluates the flow of plastics.
4. Haze Meter: Measures the opacity of polymers.

Conclusion and Outcomes

The visit to CIPET provided students with valuable insights into plastic processing and testing. By observing and learning about various equipment, manufacturing processes, and analysis tools, students were able to relate their theoretical knowledge to real-world applications in chemical engineering. The experience reinforced concepts from courses such as Mechanical Unit Operations, Material and Energy Balance, Instrumentation and Control, Polymer Science and Technology, and Petrochemical Technology. This hands-on exposure gave students a deeper understanding of industrial practices and enhanced their learning experience.





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Students and Faculty of Chemical Engineering at CIPET along with the staff of CIPET.

In The News !



సీపెట్ ను సందర్శించిన సీబీఐటీ స్టూడెంట్స్

ముద్ర, హైదరాబాద్: సీబీఐటీ కెమికల్ ఇంజనీరింగ్ విభాగంలోని డ్రాఫ్ట్ ఈయర్ విద్యార్థులు, లెక్చరర్లు హైదరాబాద్ చెర్లపల్లి లో గల సెంట్రల్ ఇన్స్టిట్యూట్ ఆఫ్ టెక్నాలజీలో ఇంజనీరింగ్ అండ్ టెక్నాలజీ (సీపెట్) ను గురువారం సందర్శించారు. ఈ సందర్భంగా సీపెట్ డైరెక్టర్ విశిష్ట కుమార్ సీపెట్ లో గల వివిధ ఇంజనీరింగ్ విభాగాలకు వివరించారు. విద్యార్థులకు ప్రాజెక్ట్ పదార్థాల తయారీ గురించి, వాటి ఉపయోగాలపై ప్రాసెసింగ్, టెస్టింగ్, టూల్ రూం, డిజైన్ గురించి వివరించారు. అనంతరం ప్రాసెసింగ్ విభాగంలో విద్యార్థులు మోల్డింగ్ మెషిన్ పని గురించి తెలుసుకున్నారు. కలర్ ఇంజెక్షన్, అమ్యు

యంత్రాలు, మైక్రో ప్రాసెసర్ నియంత్రణ యంత్రాలు, అన్ని విద్యుత్ యంత్రాలు, బహుళస్థాయి ట్రేస్ ఫిల్మ్ మెషిన్లు, ఫ్రెస్ట్ బ్లో మోల్డింగ్ మెషిన్లు ఉపయోగించే విధానాన్ని పరిశీలించారు. వివిధ టూల్ రూం మెషిన్ జిగ్ బోరింగ్ యంత్రం, కోఆర్డినేట్ డ్రిల్లింగ్, బోరింగ్ మెషిన్, హైడ్రో కాపియింగ్ అటాచ్ మెంట్ కూడిన ర్యుడమెన్ డై సింకింగ్ మెషిన్ సెంటర్ లాట్, రోటరీ ఉపరితల గ్రౌండింగ్ స్వతంత్ర గ్రౌండర్, ఆప్టికల్ ప్రాజెక్ట్ గ్రౌండింగ్ యంత్రం గురించి తెలుసుకున్నారు. పారిశ్రామిక సందర్భంలో లెక్చరర్లు డాక్టర్ నాగ ప్రహ్లాద్, బాలకృష్ణ, డాక్టర్ ప్రసన్నరాణి, విద్యార్థులు పాల్గొనగా అన్నిటి రెడ్డి, విష్ణు, రేవంత్ రెడ్డి, శ్రీనివాస్ రెడ్డి కోఆర్డినేటర్లుగా వ్యవహరించారు.

ముద్ర Fri, 17 March 2023
epaper.mudranews.in/c/71942834

సీపెట్ ను సందర్శించిన విద్యార్థులు



సీపెట్ ను సందర్శించిన విద్యార్థులు..



(ప్రజావినికిడి, మెహదీవట్టు):

పాఠ్యాంశాల్లో భాగంగా పారిశ్రామిక సందర్భానందం ఈ రోజు సీబీఐటీ కెమికల్ ఇంజనీరింగ్ విభాగంలోని మూడవ సంవత్సరం విద్యార్థులు మరియు అధ్యాపకులు హైదరాబాద్ చెర్లపల్లి లో గల సెంట్రల్ ఇన్స్టిట్యూట్ ఆఫ్ టెక్నాలజీలో ఇంజనీరింగ్ అండ్ టెక్నాలజీ (సీపెట్) ను సందర్శించారు. సీపెట్ డైరెక్టర్ శ్రీ వి.కిరణ్ కుమార్ సీపెట్ లో గల వివిధ ఇంజనీరింగ్ విభాగాలకు వివరించారు. విద్యార్థులకు ప్రాజెక్ట్ పదార్థాల తయారీ గురించి మరియు వాటి ఉపయోగాలు పై ప్రాసెసింగ్, టెస్టింగ్ మరియు టూల్ రూమ్ అలాగే డిజైన్ గురించి వివరించారు. ప్రాసెసింగ్ విభాగంలో విద్యార్థులు మోల్డింగ్ మెషిన్ పని గురించి తెలుసుకున్నారు. కలర్ ఇంజెక్షన్, అమ్యు యంత్రాలు, మైక్రో ప్రాసెసర్ నియంత్రణ యంత్రాలు, అన్ని విద్యుత్ యంత్రాలు, బహుళస్థాయి ట్రేస్ ఫిల్మ్ మెషిన్లు, ఫ్రెస్ట్ బ్లో మోల్డింగ్ మెషిన్లు యంత్రాలను ఉపయోగించడం గురించి తెలుసుకున్నారు. వివిధ టూల్ రూమ్ మెషిన్ జిగ్ బోరింగ్ యంత్రం, కో-ఆర్డినేట్ డ్రిల్లింగ్ మరియు బోరింగ్ మెషిన్, హైడ్రో కాపియింగ్ అటాచ్ మెంట్ కూడిన ర్యుడమెన్ డై సింకింగ్ మెషిన్ సెంటర్ లాట్, రోటరీ ఉపరితల గ్రౌండింగ్ స్వతంత్ర గ్రౌండర్ మరియు ఆప్టికల్ ప్రాజెక్ట్ గ్రౌండింగ్ యంత్రం గురించి తెలుసుకున్నారు. అధ్యాపకులు పారిశ్రామిక సందర్భంలో డాక్టర్ నాగ ప్రహ్లాద్, బాలకృష్ణ మరియు డాక్టర్ ప్రసన్న రాణి విద్యార్థులతో కలిసి ఉన్నారు అలాగే సీపెట్ డిప్యూటీ విద్యార్థులకు సీబీఐటీ లో గల టీచింగ్ కెమికల్ ఇంజనీరింగ్ కోర్స్ చేయటం ద్వారా వచ్చే వివిధ ఉద్యోగ అలాగే ఉపాధి అవకాశాలు గురించి వివరించారు. ఈ కార్యక్రమంనికి స్పందన కో-ఆర్డినేటర్లుగా అన్నిటి రెడ్డి, విష్ణు రేవంత్ రెడ్డి, శ్రీనివాస్ రెడ్డి వ్యవహరించారు.



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Lecture Series Spotlight

11/11/2022

Computational thinking in Chemical Engineering

**CHAITANYA BHARATHI
INSTITUTE OF TECHNOLOGY (A)**
Kokapet (Village), Gandipet, Hyderabad, Telangana-500075, www.cbti.ac.in

COMMITTED TO
RESEARCH,
INNOVATION AND
EDUCATION

44
years

Lecture Series-IX | Computational thinking in Chemical Engineering

11th November 2022 6PM

Speaker

DR. SRINIVASA MOHAN
Senior Principal Application Specialist,
Ansys

Srinivasa Mohan is a chemical engineer with a PhD from the Indian Institute of Science, Bengaluru on the Mathematical modelling of dry granular flows. He has been associated with Ansys in various technical roles since December 2000. He was responsible for developing models for multiphase flows for challenging industrial problems. Some of them include models for microfluidic flows, multiphase regime transitions and particulate flows.

In his current role as a Senior Principal Application Specialist, he is responsible for developing machine learning inspired solutions that synergistically utilize simulations and measurements to reduce the time and cost required to generate insights for product engineering, from conceptual models through verification and validation, and in improving the performance of the products in operation through digital twins.

Organized by
Indian Institute of Chemical Engineers, Hyderabad Regional Centre (IICHe HRC)
In association with: Department of Chemical Engineering,
Chaitanya Bharathi Institute of Technology, Hyderabad.

Registration

FREE

REGISTRATION LINK :

<https://forms.gle/DokzBt5asQl2nPEA>

Meeting link:

<https://cbtiyd.webex.com/cbtiyd.j-phi?MTID=mc44b5fd5825996705ee1391e85ad6b>

Meeting number:

2643 378 5935

Password:

Dj2QuZaTJ44

"All registered participants will get e- certificate subjected to attendance and submission of feedback form."

The meeting link will be provided through e- mail to the registered participants"

Timings	Details
6.00 - 6.02 PM	Prayer Song
6.02 - 6.04 PM	Welcome address by Dr. Sanjay Bhardwaj, Chairman, IICHe-HRC
6.04 - 6.05 PM	Introduction of speaker by Dr. K.Prasad Babu ,CBIT IICHe Student chapter coordinator .
6.05 - 6.35 PM	Lecture by Dr. Srinivasa Mohan, Senior Principal Application Specialist, Ansys
6.35 - 6.55 PM	Q & A session
6.55 - 7.00 PM	Vote of Thanks By Dr. B.Ganesh Asst. Professor , Dept. of Chemical engineering ,CBIT
	Followed By National Anthem

ORGANIZING COMMITTEE

Faculty coordinators

Dr. K.Prasad Babu
Dr. B.Ganesh

CBIT IICHe Student chapter

Student coordinators

P.Harish
C.Manoj

CBIT IICHe Student chapter

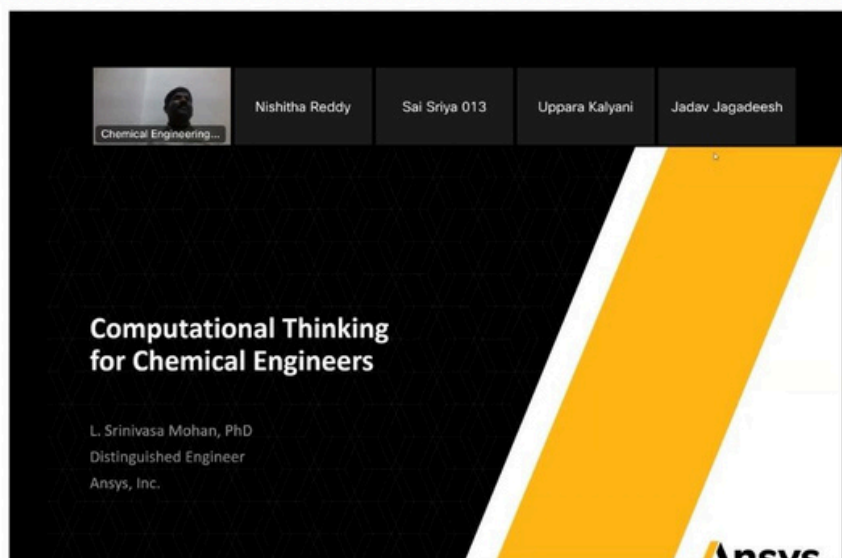
The Department of Chemical Engineering, in collaboration with the Indian Institute of Chemical Engineers, Hyderabad Regional Centre (IICHe HRC), organized Lecture Series-9 on "Computational Thinking in Chemical Engineering" on November 11th, held online. The event began with a warm welcome to the dignitaries by Nishitha Reddy, followed by a prayer song performed by Sai Sriya Kala.

After the prayer, Dr. Sanjay Bhardwaj, Chairman of IICHe HRC, addressed the audience and the distinguished guests. Dr. K. Prasad Babu, CBIT IICHe Student Chapter Coordinator, then introduced the guest speaker to the attendees.



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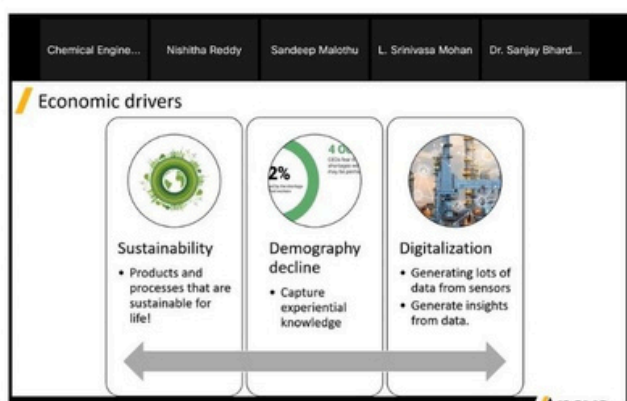
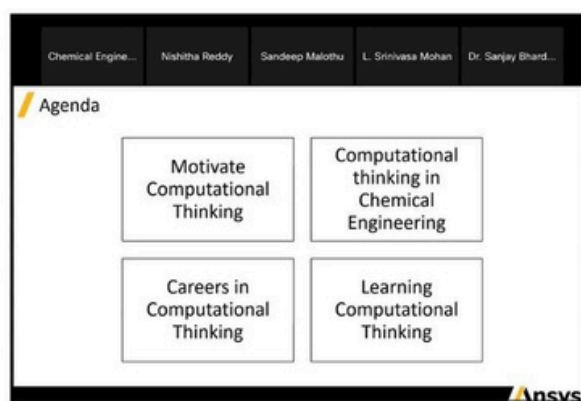
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After the introduction, Dr. Srinivas Mohan, Senior Principal Application Specialist at Ansys, took over the session. He began by discussing the role of computational thinking in chemical engineering and the fundamentals of building a career in this field.

He then provided an illustration of computational thinking, explaining various models in chemical engineering and how computational thinking aids in the scale-up process.

Following the presentation, the session moved into a questionnaire segment, where students and attendees had the opportunity to ask questions and clarify their doubts with the guest speaker.

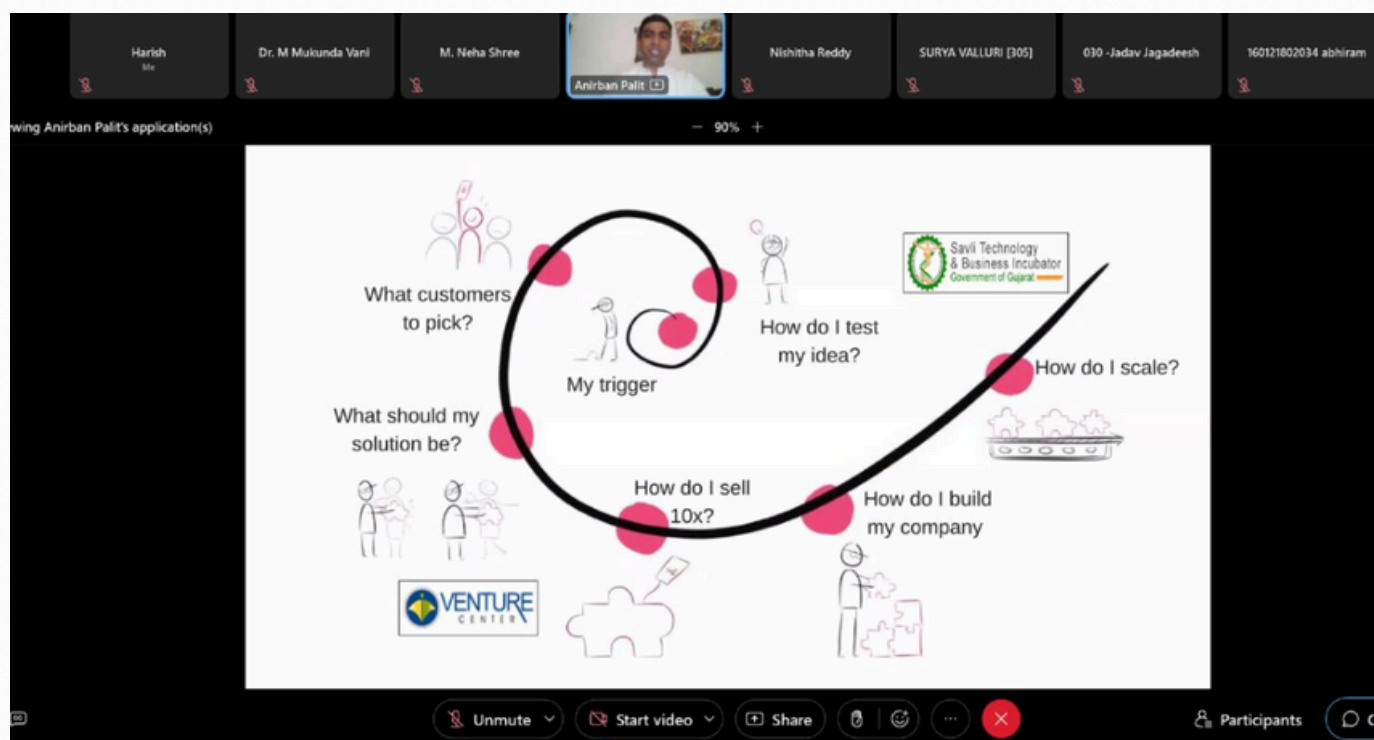


31/03/2023

Building Pragmatech: My Journey as an entrepreneur from problem to solution whilst chasing impact .

The Chemical Engineering Department, in collaboration with the Indian Institute of Chemical Engineers (IICChE) Hyderabad Regional Centre (HRC), organized Lecture Series-12 on March 31st, 2023, held online. The session began with a warm welcome to the dignitaries by Nishitha Reddy, followed by a prayer song performed by Sai Sriya Kala.

Dr. Sanjay Bhardwaj, Chairman of IICChE-HRC, then addressed the audience and distinguished guests. After the welcome speech, Dr. K. Prasad Babu, CBIT IICChE Student Chapter Coordinator, introduced the speaker, Mr. Anirban Palit. Mr. Palit then took over the session, sharing his journey as an entrepreneur, focusing on the process of moving from problem to solution while making an impactful difference.





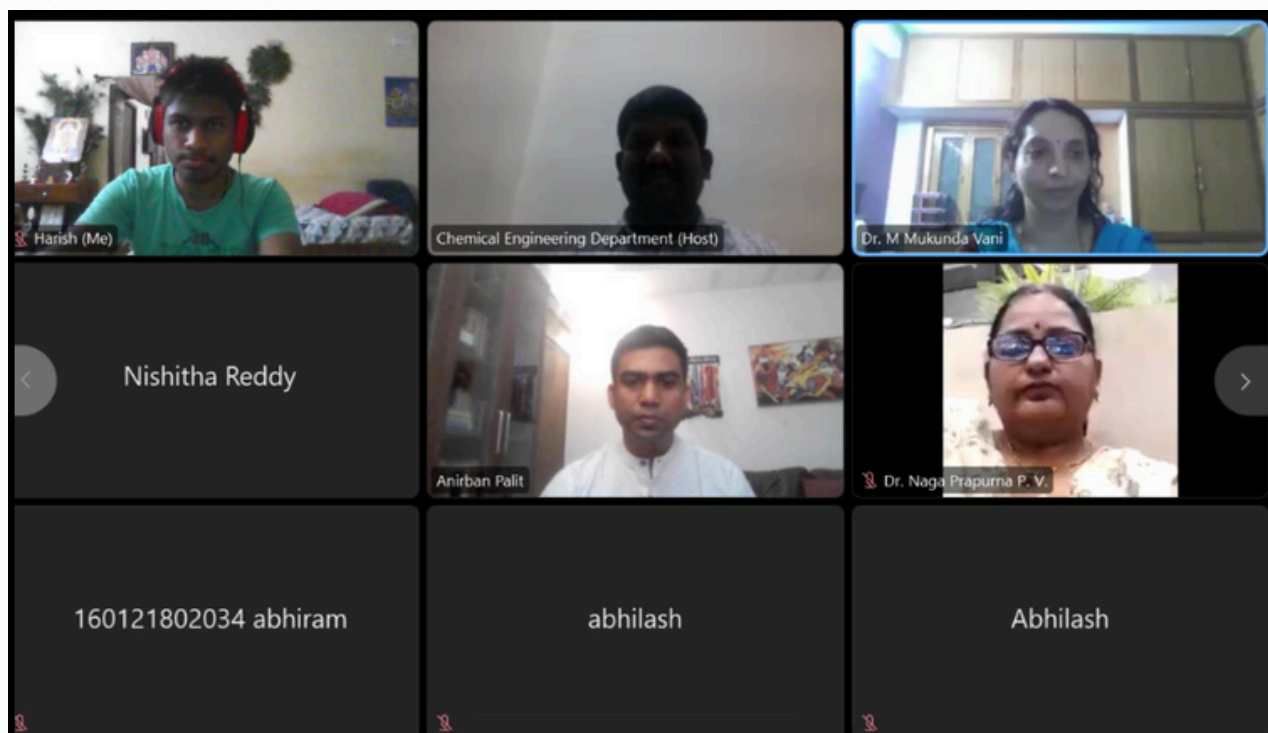
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He also shared insights into his journey as an entrepreneur, discussing the challenges he faced while building Pragmatech Solutions. Additionally, he emphasized the significance of regular cervical cancer screenings and raising awareness about the issue in today's society.

Following the brief overview of the lecture series, a questionnaire session was held where students and other attendees had the opportunity to clarify their doubts with the guest speaker.

After the session, Dr. K. Prasad Babu, Faculty Coordinator of the IIChE Student Chapter Hyderabad, delivered the vote of thanks. The event concluded with the singing of the National Anthem and a group photo.



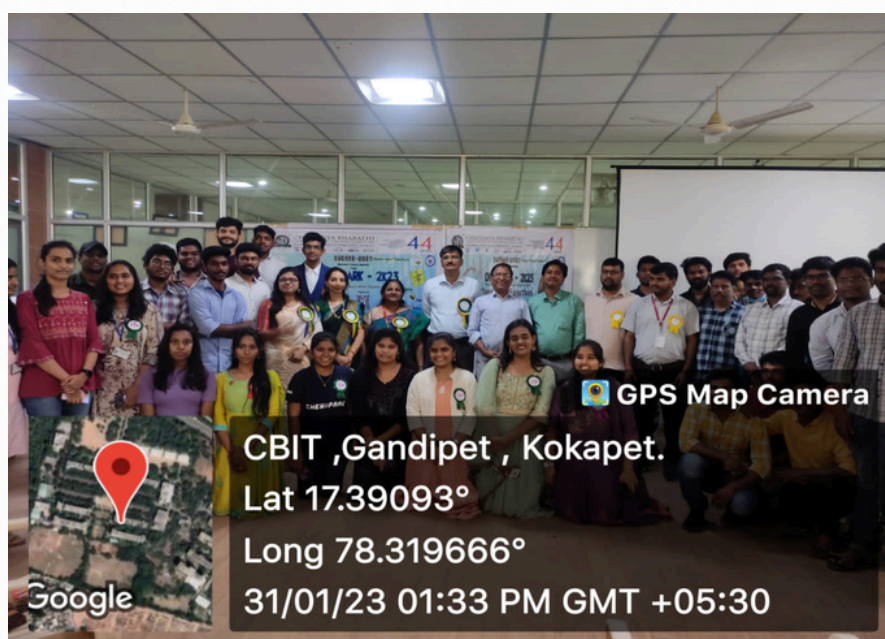
**Chemspark 2K23 - Inaugural and Keynote Session**

The inaugural session of Chemspark 2k23 took place on January 31, 2023, from 11:15 AM to 12:30 PM at the Placement Seminar Hall. The event began with opening remarks from Dr. M. Mukunda Vani, the Convener of Chemspark 2k23, followed by addresses from the Head of Department, student coordinators, and Dr. NLN Reddy. Sri Mikkilineni Akkaiah Choudary, Retd. General Manager of Indian Oil Corporation Limited Refineries Division, was the chief guest and keynote speaker.

Sri Mikkilineni Akkaiah Choudary, a post-graduate from Osmania University, served IOCL for 35 years in various roles, retiring as General Manager. His keynote address was titled "Overview of Energy Scenario & Sustainable Development Measures in Process Industries." He discussed how energy has been a driving force throughout human evolution, from the early use of fire and animal power to today's reliance on electricity and sustainable fuels. Energy remains essential for basic services like cooking, heating, cooling, lighting, mobility, and powering machines across all sectors.

Sri Akkaiah Choudary highlighted the challenges of reliable and clean energy access, emphasizing it as a barrier to improving global well-being. He provided an overview of India's energy scenario and the sustainable development measures adopted at refineries. Key initiatives include the implementation of BS-VI fuels, increased furnace/boiler efficiency, a shift to natural gas from fuel oil, gas oil, and naphtha, carbon capture utilization and storage, and the use of renewable energy. He also touched on the future of hydrogen production for mobility and energy needs, noting that future refineries would focus more on petrochemical production, requiring significant investments in both upgrading existing refineries and establishing new ones.

The session concluded with closing remarks and a vote of thanks from the faculty coordinator, Dr. Prasanna Rani R.



Group Photo of the inauguration ceremony with the Chief Guest



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Additional Highlights :

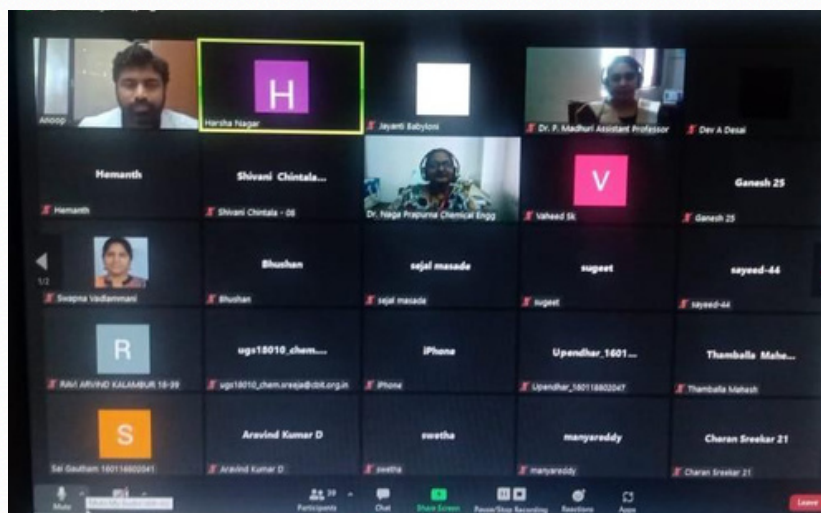
1. Student Achievement

- Mr. G. Bhushan, 8th-semester student, was honored with the Padmasri Dr. B. Raju Memorial Best Merit Student Award by IICChE-HRC on July 2, 2022, representing the Student Chapter, CBIT.



2. Guest Lecture on Molecular Dynamics

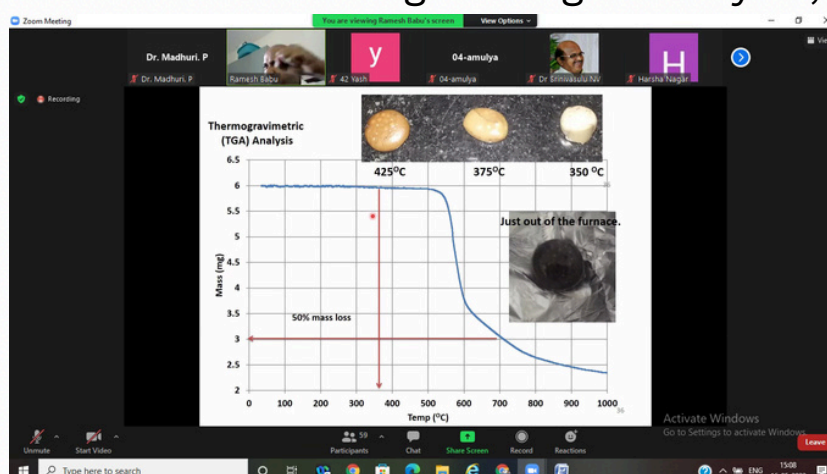
- Dr. Anoop Kishore, Assistant Professor, Department of Chemical Engineering, Manipal Academy of Higher Education (Alumnus, 2009 batch), delivered a lecture on “Atomistic Modeling using Molecular Dynamics Simulations and its Applications” to B.Tech Chemical 8th-semester students on February 4, 2022.





3. Guest Lecture on Polymers in Chemical Engineering

• Prof. Ramesh Babu Adusumalli, Associate Professor, Department of Chemical Engineering, BITS Pilani-Hyderabad Campus (Alumnus, 2000 batch), addressed B.Tech Chemical 6th and 8th-semester students on “Role of Polymers in Chemical Engineering” on May 14, 2022.



4. Guest Lecture on Circular Economy and Internships

• Ms. Sindhuja Talla, Managing Director, Biosephia Engineering Services, Hyderabad (Alumnus, 2018 batch), conducted a session for B.Tech Chemical 4th-semester students on “Circular Economy & Sustainability” and “Internship Opportunities in Biosephia” on June 21, 2022.



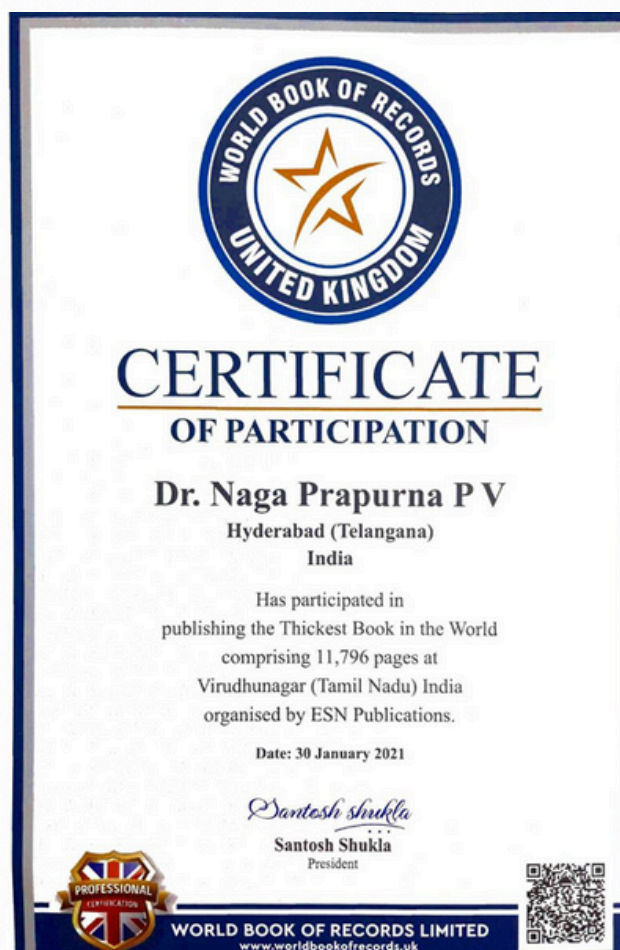


CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY

Autonomous Institute | Affiliated to Osmania University

Faculty Achievements

Sl. No.	Name of Award	Name of Recipient	Department	Award Conferred by	Award Date
1)	World Book of Records, United Kingdom for Book Chapter in Thickest Book, LIFE-2021	Dr. P. V. Naga Prapurna	Chemical Engg	United Kingdom, given at ESN publications, Tamilnadu	30 th Jan, 2021
2)	Best Academic Familiar Female Faculty	Dr. P. V. Naga Prapurna	Chemical Engg	South Indian ASDF-SIAA, United Kingdom, given at Puducherry.	3 rd April, 2021





Other Activities at a Glance

1. Funded Projects

- Students with faculty mentors under ACIC-CBIT secured 6 funded projects.
- Amounts received: ₹10,000, ₹15,000, ₹25,000, ₹50,000, and ₹75,000.

2. Ongoing Consultancy Works

- 1 Project: Scale-up studies on reactive distillation by Dr. M. Mallaiah with a funding of ₹17,19,024.

3. Faculty Development

- 9 Faculty Members participated in FDPs, Training Programs, STTPs, and Workshops.

4. Faculty Publications

- 12 Publications in SCI/Scopus-indexed conferences.

5. Resource Contributions by Faculty

- 10 Faculty Members acted as resource persons, delivered invited/guest lectures, or conducted workshops at other institutions.

6. Student Research

- 5 Papers published in conferences and journals by students.

7. Student Achievements

- 36 Students received awards/certificates in curricular, co-curricular, and extracurricular activities.

8. Internship Participation

- 76 Students underwent internships.
- 14 Students completed paid internships with pay ranging from ₹8,000 to ₹45,000.