

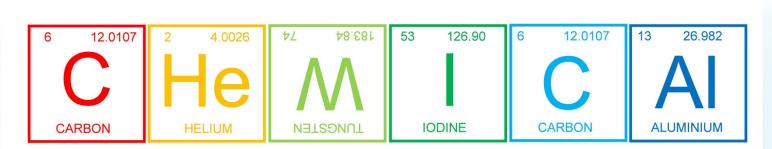


V.V.P.

ENGINEERING COLLEGE

AICTE Approved & Affiliated to GTU, Ahmedabad

Jan-June 2022-Vol. 8



ENGINEERING DEPARTMENT





Message from Chairman-Governing Body



Shri Lalitbhai Mehta

India's energy transition is in its own interest because, otherwise economic growth would not be sustainable and human security would be at stake, since millions of climate refugees are created due to the devastating consequences of climate change.

The Prime Minister has committed to increase renewable energy and reach 500GW target by 2030, which is only 100GW in 2021.

Our Wind energy production is only 12.5% of the total potential and solar energy production is only 4.6% of the total potential, a challenging task to tap unused resources.

The Prime Minister has announced the launch of the National Hydrogen Energy mission.

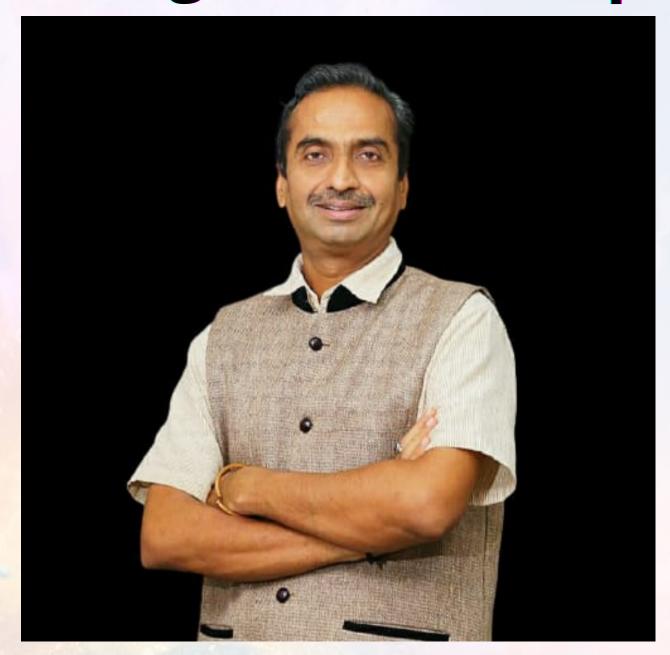
Green Hydrogen is a major component of renewable capacity of energy.

Engineering problems of cost, scale, adopting new technologies, working out distributing chains and storage of Hydrogen should be met by the government, bureaucracy, universities, engineers and technocrats by a coordinated policy and its implementation.

V.V.P. Engineering College, Rajkot

Message from Principal





Dr. Jayesh Deshkar

Welcome to V.V.P. Engineering College, a world class center for excellence in technical education. We are a leading technological institute of India, a home to a wide range of academic departments, providing best education in the major areas of technology and services in the area of research and consultancy.

We are proud and distinct through our global technical perspective, cosmopolitan character and being deeply rooted in the high Indian traditional culture, heritage and values.

You would enjoy the challenges and opportunities we offer. We look forwards to welcoming the engineering aspirants to a place of genuine intellectual excellence for an unforgettable simulating experience in the world of existing and emerging technologies, Welcome back to Future....

About the Institute



Vyavsayi Vidhya Pratishthan (V.V.P.) Engineering College is established by Rajkot Nagrik Sahakari Bank Ltd. to promote excellence in engineering education. The trust was founded in 1996 with an objective of meeting technical requirements of Gujarat. V.V.P. Engineering college has been matching ahead with a vision of transforming aspiring engineers to industry ready engineers, serving the nation at large.

The disciplined academic environment strengthening technical foundation of the students, is the unique identity of V.V.P. Innovation, creativity, team-spirit, entrepreneurship add to the scholastic achievements of the students and give them opportunities to enhance their personalities. The transparent governance and dedicated teaching by the qualified faculties make V.V.P. one of the most sought for engineering colleges of Gujarat.

With the best theoretical and practical teaching in the well-equipped classrooms and laboratories, V.V.P. is also well known for its modern library, wi-fi campus, training & placements programs, expert lectures and strong alumni network.

Needless to say that V.V.P. Engineeering College keeps no stone upturned in directing students towards research activities like the practice of research paper writing, patent drafting, paper presentation and poster presentation. Students having interest in sports & Cultural Activities also find a convenient environment and guidance here, through various club activities.

Vision



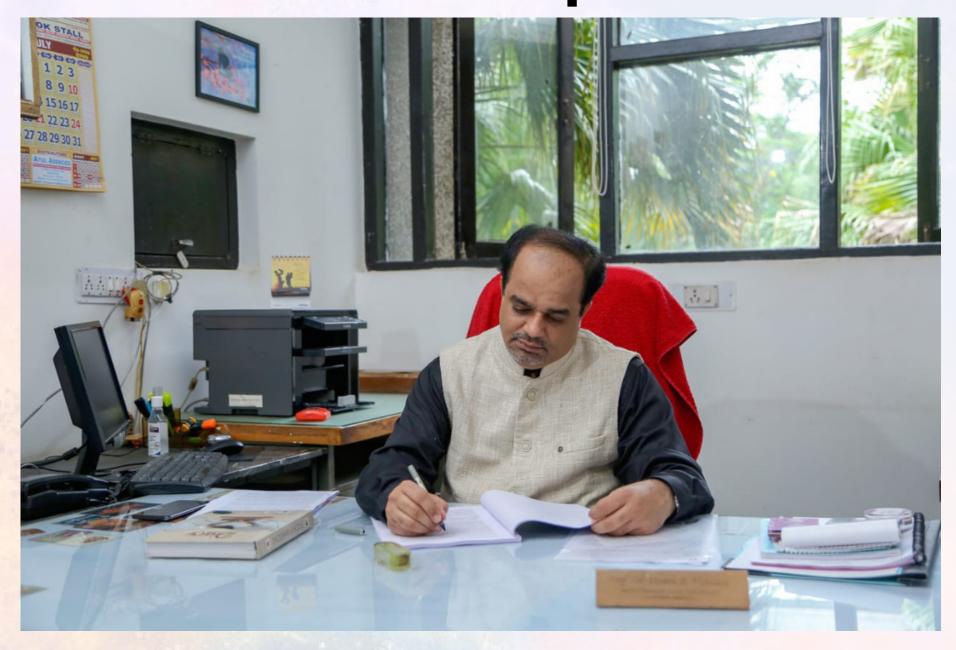
To be an exemplary institute, transforming students into competent professionals with human values.

Mission

- To provide a conducive academic environment for strengthening technical capabilities of the students.
- To strengthen linkage with industries, alumni and professional bodies.
- To organize various co-curricular and extracurricular activities for overall development of the students.
- To practice good governance and conduct value- based activities for making students responsible citizens.

Message from Head of the Department





Dr. Piyush Vanzara

Chemical Engineering Department of V.V.P Engineering College, Rajkot is a pioneer department in Saurashtra - Kutch region functions with the motto of driving the process industries by producing the quality minds and believe in inculcating moral value among pupil.

The department also takes pride in being nearest to the world's largest chemical industry, Reliance Industries Limited, Jamnagar.

The department is well collabrated with industries for Environment Audit (NABL accredited and GPCB recognised schedule-I auditor), Extended in house learning program, Faculty Exchange Program, Expert talk, Industrial visits, Research project, Campus placement etc. The Department is also blessed with experienced faculty member holding Ph.D and Master Degree from Reputed Universities of the country. Proud alumni of the department are also shining in a variety of sectors all across the globe.

I Welcome you all to one of the best Chemical Engineering Department of Gujarat which is the hub of chemical industry in the country.

Chemical Engineering Department Vision

To be evolved as a leading resource of competent chemical engineering professionals with human values.

Mission

- To develop technical competence among students for solving problems of chemical and allied industries.
- To provide platform for overall development of students along with technical proficiency through co-curricular and extra- curricular activities as well as academic, alumni, research and industrial collaborations.
- To nurture human values in students by addressing social and environmental aspects.

Program Educational Objectives (PEOs)

- Apply knowledge of chemical engineering to address real-world issues.
- Establish successful career with professional ethics in chemical industries, academia and research institutes.
- Establish as chemical engineering professionals with teamwork, leadership, effective communication, innovative thinking and problem-solving skills.
- Influence society by agglomeration of human values along with sustainable technologies.

Program Specific Objectives (PSOs)

On successful completion of program, graduates will be able to:

- Apply knowledge of basic sciences, unit operations and unit processes to identify and solve problems of chemical and allied industries.
- Design innovative, economic, greener and safer processes and equipment using fundamentals of thermodynamics, kinetics, materials and energy balances.
- Model, simulate, control and optimize chemical engineering processes.

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3	Departmental Activities (Expert Lecture, Webinar, Skill Development Program, Alumni Interaction, Technical/Non-Technical Events, Parents Meeting and Industrial Visit)

GLIMPSES OF PLACEMENT 2022





V. V. P. Engineering College - Rajkot

Chemical Engineering Department

Placement - 2022















Shubham Sakhreliya TATA CONSULTANCY SERVICES



Sinsinwar TATA TATA CHEMICALS LIMITED

Lata

Nikhil Bhundiya

Hardik Vekariya

Krish Patel















Rever

Jay



Venil

Bhautik Kothari

Naimish Thaker

Jayrajsinh Jadeja

Kaushal Lunagariya

















EFF Composites Pvt. Ltd.







Pratipalsinh Solanki



















1PP Composites Pvt. Ltd.



Mihir Khunt

Keval Menpara





Infosys









7th Sem Student Shingala Avin Secured 1st rank in Chemical Engineering in GTU

7 Sem Student Yogi Parth Secured 10 rank in Chemical Engineering in GTU





3 Sem Student Nakrani Kevin secured 7 rank in Chemical Engineering in GTU

1st Sem Student Dev Thoria secured 7thrank in Chemical Engineering in GTU



Departmental Achievements

- A paper published in science direct Elsevier Journal-Cleaner engineering and Technology Vol.6 (2022) 100366 titled " A comprehensive review of design parameters, thermal performance assessment and medium temperature solar thermal applications of Scheffler concentrator" co-authored by Ph.D. scholar Kajal.J.Sareriya and Dr. Subarna Maiti- scientist- CSMCRI-Bhavanagar.
- A research paper presented by Mr. Ajinkya Patwardhan, Ph.D Scholar of Dr. Piyush B. Vanzara on "A Review on valorization of CO by Electrochemical route" in 2nd Virtual international conference on chemical sciences in sustainable Technology & Development organized by chemistry Department of SVNIT, Surat, Gujarat in association with the department of Chemistry, Chungang University, South Korea.
- Dr. Piyush B. Vanzara guided a student named Parthik Chadotara along with Mr. Ajinkya Patwardhan for the project work entitledd " Electrochemical reactor for CO₂ Electro-reduction to value added Products. This project secured 2 rank in the entire state under interlinking of industries, Academia & Governement organized by GCPC (Gujarat Clearner Production centre) Gandhinagar on 11th March 2022. He also received cash prize certificate Rs.5000/of and of appreciation and contribution" student as well as to both Guides. The Project also received a grant from SSIP, of our institute.



Dr. Piyush B. Vanzara Professor and Head



Mr. Ajinkya Patwardhan Assistant Professor



V.V.P. Engineering College, Rajkot

Departmental Achievements





• Invited to judge the projects for a Project Fair organized by Kalyan Polytechnic, Jamnagar on 26thMarch 2022.

Dr. Vyomesh M. Parsana Assistant Professor

- Dr. Darshana Bhatti has Successfully completed 3 month Swayam course on 'waste to energy conservation' with 93% and gold medal.
- She Published patent on "Pharmaceutical industry wastewater treatment scheme using Ag-Fe CO-doped TiO₂ nanoparticles.
- She published a research paper in springer journal in April, 2022 having IF 4+ in the journal "Environment Science and Pollution Research" on A statistical modeling-optimization approach for photocatalytic degradation of diflouro triazole acetophenone using Ag-Fe CO-doped TiO; response surface methodology.
- She published a review paper in UGC care journal current world environment journal in April 2022 on "Recent Progress in Doped TiO₂ Photocatalysis and Hybrid Advanced Oxidation Processes for Organic Pollutant Removal from Wastewater".
 - Nikhil Bhundiya secured AIR 1724 in GATE-2022



Dr. Darshana T. Bhatti Assistant Professor



Mr. Nikhil Bhundiya Student 7 Semester

V.V.P. Engineering College, Rajkot

Expert Lectures

Refinery - An Overview by Mr. Rajendra Kakkad



An expert talk on REFINERY -AN OVERVIEW

Under the aegis of Faculty Exchange program between Chemical Engineering Department and Nayara Energy Ltd.Jamnager Refinery, an expert talk will focus on an overview of a refinery for Semester 4th 6th and 8th Chemical Engineering students.



29th Jan 2022 11.00 am

M.S. Teams

Coordinator:

Dr. S S Korgaokar Asst Prof Chemical Engineering Department Meet Our Speaker



Mr. Rajendra P. Kakkad DGM - Nayara Energy Ltd. Diploma in Industrial Safety M.Sc(Industrial Chemistry) BE(Chemical) Work experience- United Phosphorus, Ankleshwar Reliance Industries Ltd. Jamnagar Ras Gas - Doha ,Qatar (Gulf)

An interactive session on "Refinery - An Overview " was conducted for students by Mr. Rajendra **Kakkad, Deputy GM - Nayara Energy Limited, Jamnagar** on 29 January, 2021. In this session, students were made aware about different aspects to run a refinery Refinery Margin, Profit Margin, like Gross Optimizations of components, planning &; scheduling, product quantity as per demand and supply, crude oil quality, etc. Students were given an overview of the refinery workflow, processes, operations, units, transportation, storage and handling of crude oil and final petroleum products, power plant, laboratories, maintenance workshop, jetty, refinery site etc. Mr Kakkad also shared the types of crude oil, different petroleum products, Indian refineries with their capacities. Students got an overview of a typical refinery through this session. The session was coordinated by Dr. Sushil S. Korgaokar.

Preparation for Group Discussion & Personal Interview by Mr. Jasmin Mehta

An excellent session on "Preparation for Group Discussion & Personal Interview " was conducted for students by Mr. Jasmin Mehta, Director,-Vision Institute of Professional Studies, Rajkot on 19 April 2022. In this session, Mr. Jasmin Mehta explained **Group Discussion** by sharing his college-time experience. He gave actual demonstration of Group Discussion with useful tips to students. The session was very interactive. The session was coordinated by Dr. Sushil S. Korgaokar.

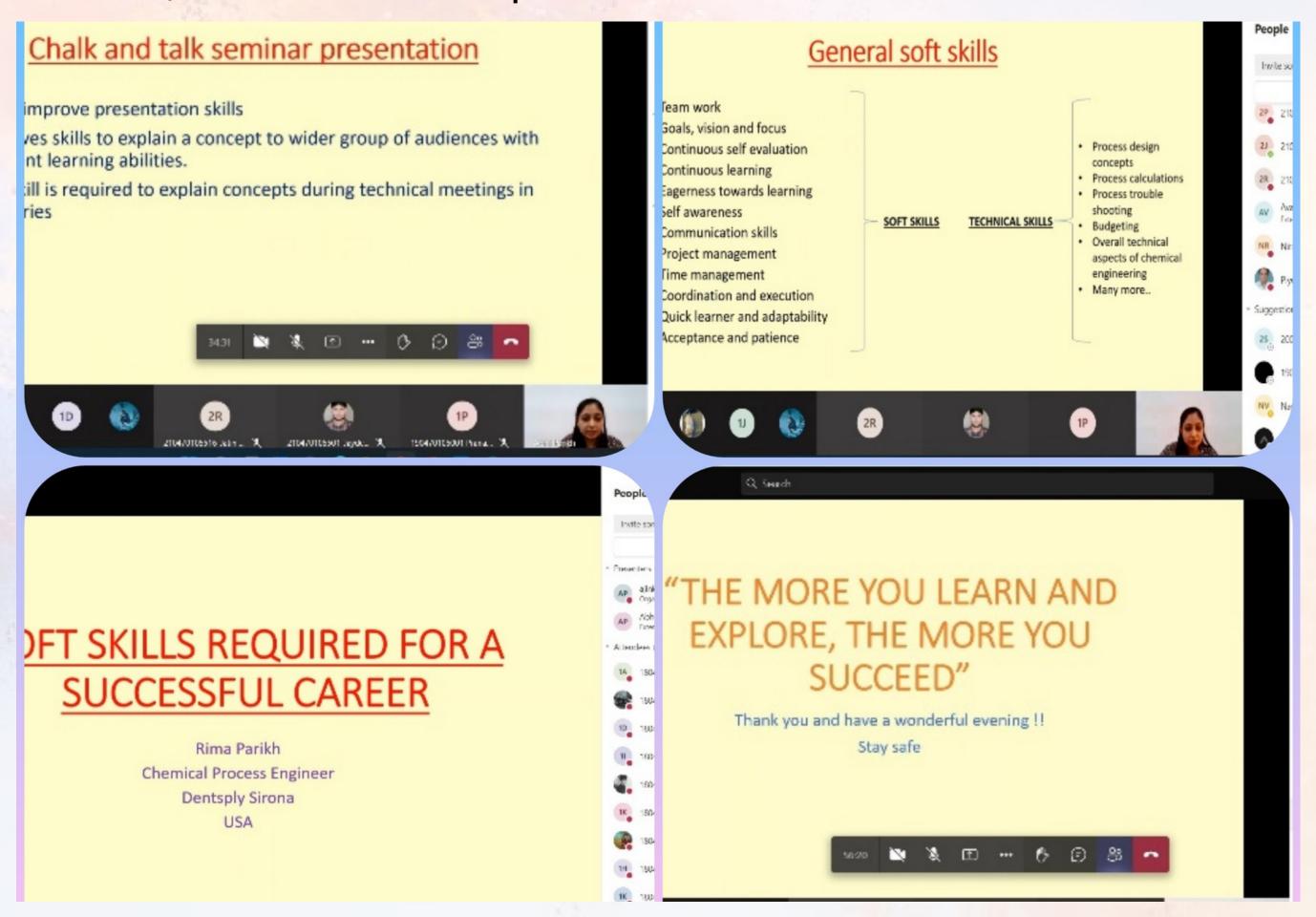


Webinars

SOFT SKILLS REQUIRED FOR A SUCCESSFUL CAREER By Ms. Rima Parikh

Chemical Engineering Department organized institute level webinar on "Soft Skills Required for a Successful Career" on 19 January 2022 through MS Teams Platform. Rima Parikh, one of the 2014 pass out batch alumni, who is currently working in a U.S. based firm 'Densply Sherona' as a chemical process engineer, was invited as the guest speaker. She talked about the importance of the soft skills as a professional and what are different soft skills required to make a successful career. She also talked about how to acquire such skills during graduation period through various activities. This webinar was planned for 4th, 6th and 8th semester students.

The webinar was coordinated by Mr. Ajinkya Patwardhan, assistant professor, chemical engineering dept. 6th sem student Pranav Ashar introduced the expert to the students and Harsh Bhatt, another 6th sem student presented the vote of thanks.



Skill Development Programme



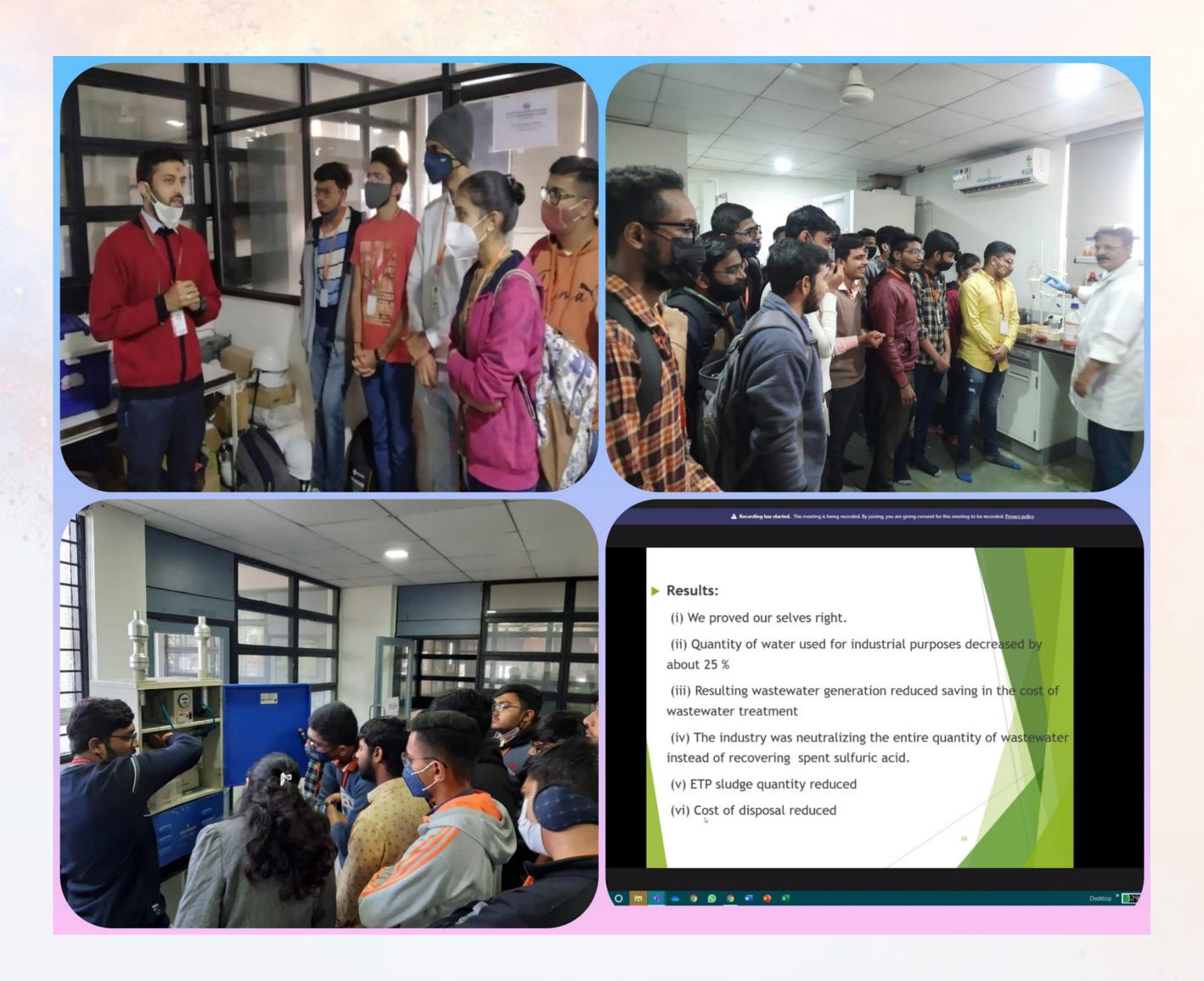
Chemical Engineering department has organized a Skill Development Program on Environment Audit and Industrial Pump from 4th April 2022- 8th April 2022 for 4th sem students. In this skill development program demonstrated the measurement of air quality parameter such as (PM,SOx and NOx) using the instruments ambient air monitoring equipment and also explained stack monitoring method with demonstration. Dr. Rupesh Ramani delivered a session on 'Centrifugal Pump: An important component in chemical industry' and explained components of pump, Centrifugal chemical pump benefits and application in chemical industry and followed by industrial visit at Virat Pumps Ltd. This programme was coordinated by Mr. Priyank D.Khirsariya.



Skill Development Programme



Chemical Engineering department has organized a Skill Development Program on Environment Audit from 14th February 2022-18th February 2022 for 4th sem students. In this skill development program Dr. Sushil Korgaokar explained method quantifies solids in water or wastewater samples using gravimetric analysis following oven drying and demonstrated TSS and TDS measure the amount of particulate matter (tiny pieces of things) floating in water which gave an insight to the students regarding the field, it's importance and application. Also, Dr.Darshana Bhatti, has explained Audit report format, Consolidated Consent and Authorization (CCA), compliance report and its importance. She has demonstrated COD and BOD analysis of industrial wastewater samples. Huma Syed, Associate Professor, GEC Bhuj, delivered a session on Environmental audit success stories. Also, Niraj Dubey, Technical Sales Support Engineer, Lanza Technical Ltd delivered sessions on risk management techniques through industrial case studies.



Alumni Interaction

Mr.Hardik Gohel (2020) gave a guidance on ROLES & RESPONSIBILITIES IN CHEMICAL INDUSTRIES [Shift Engineer, Saurastra Chemicals Limited, Porbandar]

Mr. Hardik Gohel, alumni of 2020, Chemical Engineering Department of V.V.P. Engg. College, Rajkot interacted with the students of B.E. 4th Semester. At start, Prof. Jilesh M. Pandya – Assistant Professor gave introduction of today's speaker to students. Mr. Hardik guided students regarding showing the readiness in industry to perform technical task and never allow your weakness to hinder your success. He also shared his industrial experience with the students. The students also interactively asked many questions to MR. HARSH regarding various roles and responsibilities offered in industry.

MR. HARSH also shared his experiences about confidence building through innovative practices and software learning to solve problems. This interactive session will help students in their academics which bring a positive change in direction of boosting confidence to shape their future in their career.



Alumni Interaction



Mr. Harish Katariya (2019) gave an expert talk on 'CHALLENGES IN CHEMICAL ENGINEERING' [Process Engineer, Meghmani Finechem Pvt. Ltd. - Dahej]



Mr. Harish Katariya, alumni of 2019, Chemical Engineering Department of V.V.P. Engg. College, Rajkot interacted with the students of B.E. 4th & 6th Semester. At start, Prof. Jilesh M. Pandya – Assistant Professor gave introduction of speaker to students.

Mr. Harish guided students regarding showing the readiness in industry to perform technical task and never allow your weakness to hinder your success. The students also interactively asked many questions to Mr. Harish regarding placement interview and his experience of working in industry.

Mr. Harish also shared his experiences about confidence building through innovative practices and software learning to solve problems. This interactive session will help students in their academics which bring a positive change in direction of boosting confidence to shape their future in their career.

Alumni Interaction

Mr. Harsh Vachhani (2020) gave an expert talk on 'GUIDANCE FOR ACTIVE PARTICIPATION IN COLLEGE LEVEL ACTIVITIES'

[Working Professional, NAYARA]



Mr. Harsh Vachhani, alumni of 2019, Chemical Engineering Department of V.V.P. Engg. College, Rajkot interacted with the students of B.E. 4th & 6th Semester. At start, Prof. Jilesh M. Pandya – Assistant Professor gave introduction of today's speaker to students

Mr. Harsh guided students regarding showing the readiness in industry to perform technical task and never allow your weakness to hinder your success. The students also interactively asked many questions to Mr. Harsh regarding placement interview and his experience of working in industry.

Mr. Harsh also shared his experiences about confidence building through innovative practices and software learning to solve problems. This interactive session will help students in their academics which bring a positive change in direction of boosting confidence to shape their future in their career.

Technical/Non-Technical Events

Chemical engineering department organized one day institute level technical event Design engineering competition on 13th April 2022. The inauguration was done in the presence head of the department. Students of the 4th and 6th semester had prepared posters based on their design engineering topics and presented the same in front of the judges Dr. Dharmesh Sur and Dr. Jayshukh Markana. Many students had presented the working model and prototypes of their project. The motive behind organizing of such events was to motivate, inspire and enable learning in the students. The students had worked hard for the completion of the event and felt motivated and inspired to take up such work in future. The whole event was co-ordinated by Mr. Pratik Koradiya.



Parents Meeting



After Covid Pandemic, first offline parents meeting organized by Chemical Engineering Department on Wednesday, 6th April-2022 in P.D.C. auditorium at 12:00 pm. Total 25 Parents were present in the parents meeting of 4th and 6th sem students.

After this, parents met the individual faculty members in mechanical operation laboratory where they have discussed about the academic performance of the students like class attendance, marks in mid semester and overall discipline in the department. The programme was coordinated by Mr. Priyank Khirsariya.



Industrial Visit

Chemical Engineering Department organizes regular industrial visits for students in order to upgrade their students with recent updates in chemical industries and make them familiar with new modern techniques engaged in the industries. Our Students have visited reputed Chemical industries, which helped them to develop innovative ideas for the research and clarify their theoretical doubts.



Visit to EPP Composites, Rajkot

The company is India's Global Composite Manufacturer. It is involved in manufacturing of all types of fiberglass composite manufacturing facilities, like resin transfer moulding machines, latest computerized filament winding machines, vacuum infusion facility, spray up machines, centrifugal casting, compression moulding facility, polyurethane sandwich and hand layup process. Students has got exposure to industrial scale equipments and learned about their operations. Mr. Dabhi has explained well all processes for polymer/ composite equipments (reactor, Scrubber etc) manufacturing. This visit was accompanied by Mrs. Dhara Upadhyay Ma'am and coordinated by Dr. Darshana Bhatti.



Visit to Shree Vam Chemicals, Kuvadva, Rajkot



The Students has got exposure to industrial scale equipments and learned about their operations. The unit is involved in manufacturing of High quality range of Aluminium Sulphate Granules, Aluminium Sulphate Lumps, Ferric And Non Ferric Alum, etc. Mr. Vishal Sarvaiya sir has explained well all processes for Alum products manufacturing. Students has got exposure to industrial scale equipments such as reactor, heat exchangers, pumps, scrubber, cooling towers etc.

The visit was co-ordinated by Dr. Darshana Bhatti. We are thankful to VAM Chemicals Pvt Ltd.

Visit to Orchave Pharma, Shapar, Rajkot

Mr. Dineshbhai Patel has explained well all processes for Ranitidine (Pharmaceutical Product) manufacturing. Orchev Pharma Pvt. Ltd has a reputation for manufacturing Ranitidine as per the latest USP/EP/BP/IP.leading manufacturer of high quality of pharmaceutical raw material in the Gujarat State of India. The unit is manufacturing high-quality Ranitidine, Famotidine, Allopurinol and Levetiracetam, students has got exposure to equipment such as reactors, absorbers, effluent treatment plant, heat exchangers etc.

The visit was co-ordinated by Dr. Darshana Bhatti.



V.V.P. Engineering College, Rajkot

We are thankful to Orchev Pharma.

Industrial Visit



Visit to Raiya Sewage Water Treatment Plant, Rajkot

The students of 6th sem visited Rajya Sewage Water Treatment Plant, Rajkot. During the visit, students were informed about basic details related to wastewater, impurities, how it is collected and reached to the treatment plant, and at last about process of wastewater treatment discarded by household water from west zone of Rajkot city. Students were gone through different treating units like Inlet chamber, Screen Units, Grit chamber, Primary settling tank, Aeration tank, Secondary settling tank, Sludge digesters. The water after being treated is used in farming to water plants. This visit was coordinated by Dr. Darshana Bhatti.



Visit to Rhodium Master, Haripar(Pal), Rajkot

A very interactive session was discussed by the owner of Rhodium Master, Mr. Gunvant Patel sharing his experience. The company is involved as buyer, refiner and supplier for Platinum Gold Metal (PGMs) & its various salts across the Globe.

Mr. Gunvant Patel personally explained each and every process taking place in the plant. He explained how the equipment works technically and how they have designed and installed handmade equipment which is comparatively cheaper then readily available ones. Students saw various equipment like centrifugal separator, ribbon blender, fume cupboard, rota evaporator and many more. This visit was coordinated by Dr. Sushil S. Korgaokar.





"Strength is Life, Weakness is Death. Expansion is Life, Contraction is Death. Love is Life, Hatred is Death."

- Swami Vivekananda

"When something is important enough, you do it even if the odds are not in your favor."

- Elon Musk

"Don't compare yourself with anyone in this world...
If you do so, you are insulting yourself."

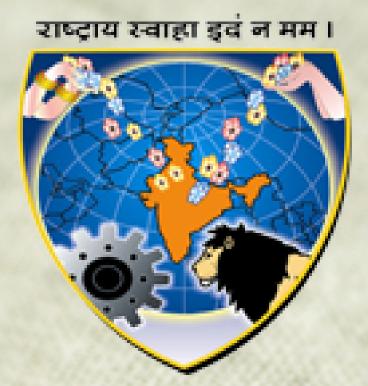
- Bill Gates



વી.વી.પી. એન્જીનીયરીંગ કોલેજના વિદ્યાર્થીઓ માટેની પ્રતિજ્ઞા



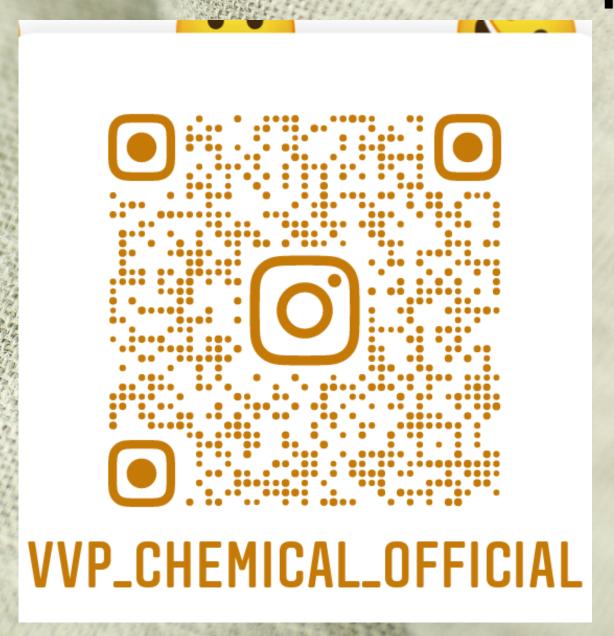
પ્રિન્સીપાલ - ડો. જયેશ દેશકર દ્વારા રચિત....



V.V.P. ENGINEERING COLLEGE

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