



Highlights of the Issue

Expert Talk Industrial Exposure Placement at SoE Recruiter Speaks Students' Achievement Research Erudite Faculty Achievement Faculty Participation Students' Alley Creative Corner

January 2022

Encrypting the Journey of Academic Excellence...



Events of Academic Excellence @ SOE

Eminent Experts

Mr. Snehal Tralsawala, CEO, Prism Consultant & Treasurer, IIChE Ankleshwar Regional Centre, delivered an Expert Talk on 'Safety: An Attitude' and 'Critical Challenges Faced by Chemical industries' for



5th and 7th-semester students, respectively, on October 14, 2021.



Mr. Jigar Doriwala, Founder of Technacious techies, delivered an Expert Talk on 'Search Engine Optimization (SEO), for 5th-semester students of Computer Engineering and Information Technology on October 12, 2021.

Industrial Exposure

Mechanical Engineering, 3rd-semester students, visited JMT Casting, Surat, on October 29, 2021.





Placement @ SOE

School of Engineering

School of Engineering heartily congratulates the following students for placement.

Enrollment No.	Name	Name of Company
18SE02CH003	CHAUHAN RUTVIKKUMAR	
	MAHENDRABHAI	Farbe Firma Pvt Ltd, Ankleshwar
18SE02CH024	MANGUKIYA PARTH	
	NITINBHAI	Spoton Coating Pvt Ltd, Kim
18SE02CH025	MAVANI VAIBHAVKUMAR	
	VANMALIBHAI	Spoton Coating Pvt Ltd, Kim
18SE02CH026	SANDEEP AMIT NATH	Farbe Firma Pvt Ltd, Ankleshwar
18SE02CH027	PAGHADAL VIVEK	
	HARESHBHAI	Spoton Coating Pvt Ltd, Kim
18SE02CH036	PATEL PARTHKUMAR	
	VIJAYBHAI	Spoton Coating Pvt Ltd, Kim
18SE02CH039	PATEL SHIVAM RAKESH	Farbe Firma Pvt Ltd, Ankleshwar
18SE02CH042	RABADIYA MIHIR DHIRAJBHAI	Farbe Firma Pvt Ltd, Ankleshwar
18SE02CH043	RAGHVANI DARSHAN	
	MAHESHBHAI	Spoton Coating Pvt Ltd, Kim
18SE02CH046	SAKHIYA DEV JAYKISHAN	Farbe Firma Pvt Ltd, Ankleshwar
18SE02CH049	SHAIKH AMAN AZIZ	Spoton Coating Pvt Ltd, Kim
18SE02CH052	SUTARIYA PARTH	
	PARESHBHAI	Spoton Coating Pvt Ltd, Kim
19SE08CH001	MENDPARA SARTHAK	
	ASHWINBHAI	Farbe Firma Pvt Ltd, Ankleshwar
18SE02CE016	GOYANI KARTIK SANJAYBHAI	Tagline Infotech, Surat
18SE02CE017	GOYANI KEVAL SANJAYBHAI	Tagline Infotech, Surat
18SE02CE022	KARNA TEJA VENUNADHARAO	Case Point Pvt Ltd, Surat & TCS Ninja
18SE02CE032	PANCHAL VAIBHAVI HITESH	Escrow Infotech, Surat
18SE02CE044	SURANI RAJANKUMAR	
	HIMMATBHAI	Zujo Tech Pvt Ltd, Surat & TCS, Ninja
18SE02CE054	DUNGRANI AJAY RAGHAVBHAI	Tagline Infotech, Surat
18SE02CE060	SOMALIYA RAHUL KISHOR	Nirman Lab, Surat
18SE02IT019	KAKUMANU KEDHARESHWAR	
	SRINIVASRAO	Case Point Pvt Ltd, Surat
18SE02IT023	KATARIYA DIPAK KALUBHAI	Case Point Pvt Ltd, Surat
18SE02IT026	KSHIRSAGAR KSHITIJ	
	MAKARAND	Case Point Pvt Ltd, Surat
18SE02IT028	MAKWANA AKSHAYKUMAR	Coruscate (DhiWise Private Limited),
	DHANESHBHAI	Surat



18SE02IT042	PATEL NILAYKUMAR	Triveni Global Software Services LLP,
	KANUBHAI	Surat
18SE02IT045	PATODIYA TEJAS AMRUTBHAI	Unikwork, Surat
18SE02IT049	SANGHANI RAJ ASHVINBHAI	TCS Ninja
18SE02IT062	VEKARIYA KISHANKUMAR SURESHBHAI	Escrow Infotech, Surat
19SE09IT002	AMBALIYA MOHITBHAI HASMUKHBHAI	Case Point Pvt Ltd, Surat
19SE09IT003	CHANCHAPARA VASUKUMAR HARESHBHAI	Escrow Infotech, Surat
19SE09IT004	MISHRA KU RUCHITA RAJESH	Augustcode Solutions Pvt Ltd, Surat
18SE02CE003	BHARGAV SHRUTIKA DHEERAJ	TCS Ninja
18SE02IT020	KANANI KEVAL BHUPATBHAI	TCS Ninja
18SE02CE024	KUKDIYA HARDIK ASHOKBHAI	TCS Ninja
18SE02CE028	MAYANI KOMAL VINODBHAI	TCS Ninja
18SE02IT016	JASOLIYA JEEL KISHORBHAI	TCS Ninja
18SE02CE015	MODHA HET DIPAK	Zujo Tech Pvt Ltd, Surat

Recruiter Speaks











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Mr. Maulik Sudani Managing Director Farbe Firma, Ankleshwar



RECRUITER'S

Students' Achievement

- **4** Mahmud Ibrahim Kani, a B.Sc. (IT) 5th-semester student, published a research paper titled "Deep Learning-based Approach to Predict COVID 19 from Skin Rashes" in the journal Juni Khyat in Volum 11, Issue 11, No. 2, having ISSN 2278-4632.
- **Smit Patel and Meet Vasani**, Computer Engineering 7th semester students, presented a paper titled "Comparative Analysis of Baseline Models, Ensemble Models and Deep Models for Prediction of Graduate Admission" in International Conference on Machine Learning, Advances in Computing, Renewable Energy and Communication on December 10-11, 2021. The paper will be published in Scopus indexed Springer LNEE series. This work is guided by Dr. Jasleen Kaur, Associate Professor, and Department of Computer Engineering & Information Technology.



Research Erudite

- Mr. Paresh Mistry, Assistant Professor, Civil Engineering Department, published a paper titled "A Review on Application of Primavera for Project Management" in International Journal of Recent Scientific Research Volume 12, Issue 10, having ISSN 0976-3031.
- Mr. Ravirajsinh Chauhan, Assistant Professor, Department of Computer Engineering & Information Technology, published a research paper titled "Sentiment Analysis To Implement Fake News Detection System Using Machine Learning Algorithms" in International Journal of Recent Scientific Research Volume 12, Issue 10(A), having ISSN 0976-3031.
- **Ms. Meera Patel**, Assistant Professor, Department of Applied Mathematics & Humanities, published a research paper titled "Pre's, While's and Post's of Writing in Technical Communication" in peer-reviewed journal ELT Voices, Volume 11, issue 2 having ISSN 2230-9136.
- Mr. Mitul Raj, and Mr. Mitul Patel, Assistant Professors, Department of Computer Engineering & Information Technology, published a paper titled "A Novel Approach to Increase Adaptability of Digital Agriculture in India" in International Journal of Recent Scientific Research, Volume 12, Issue 09 (D), having ISSN 0976-3031.
- Ms. Nafisa Shaikh, Assistant Professor, Civil Engineering Department, and Mr. Mitul Raj, Assistant Professor, Department of Computer Engineering & Information Technology, published a paper titled "Effect of Industrial Waste Water Contamination on Geotechnical Properties of Soil" in the Journal of Emerging Technologies and Innovative Research, Volume 8, Issue 11, having ISSN 2349-5162.
- Ms. Payal Bhatt & Ms. Pankty Fruitwala, Assistant Professors, Department of Applied Mathematics & Humanities, published a research paper titled "Aims & Attitude in Teaching Critical Thinking" in the Journal of Emerging Technologies and Innovative Research, Volume 8, Issue 12, having ISSN 2349-5162.



Faculty Achievement

School of Engineering

- Dr. Jasleen Kaur, Associate Professor, Department of Computer Engineering & Information Technology, chaired a session "Women in Engineering" during IEEE Second International Conference on Technology, Engineering, Management for Societal impact using Marketing, Entrepreneurship, and Talent organized by Symbiosis Institute of Computer Studies and Research, Pune on Dec 1-3, 2021.
- Mr. Ravirajsinh Chauhan, Assistant Professor, Department of Computer Engineering & Information Technology, served as a Reviewer in 4th International Conference on Futuristic Trends in Networks and Computing Technologies (FTNCT-2021) organized by Department of Computer Science and Engineering Institute of Technology, Nirma University, India on Dec 10-11, 2021.
- Mr. Jigesh Mehta, Assistant Professor, Chemical Engineering Department delivered an - Expert talk on 'Distillation' for 5th Semester diploma Chemical Engg. students at Valia Polytechnic Institute, Valia, on October 18, 2021.

Expert talk on "Chemical Process Technology: A New Era if Indistrialization" at Tapi Diploma College, Surat, on November 24, 2021.

Faculty Participation

Dr. Jasleen Kaur, Associate Professor, Department of Computer Engineering & Information Technology, attended GUJCOST and IE(India) sponsored One-Week Online Faculty Development Programme on "Machine Learning to Deep Learning: Trends and Challenges" during December 13-18, 2021.

Mr. Paresh Mistry, Assistant Professor, Civil Engineering Department, participated in -

- One Day International Webinar on 'The Role of Legal Regime for Efffective Enviornmental Management, Governance and for the Sustenance of sustainable Development in India' (TEGS-2021) organized by Bhuneshwar Institute of Technology, Bhneshwar, Odisha on November 22, 2021.
- Seminar titled 'Condition Survey, Monitoring, and Rehabilitation of Multi storeyed Building' organized by UltraTech Cement Ltd., on December 18, 2021.
- International webinar title 'Lightweight Metal Matrix Composites for Automotive Application' organized by Bhuneshwar Institute of Technology, Bhneshwar, Odisha on December 11, 2021.



Students' Alley

STITCHES in TIME

"Time flies so fast" isn't it true after all?

From contributing 5-10 rupees to buy new ball, to throwing a party all by yourself From playing outside in muggy weather, to chilling and playing mobile games with ac on. From buying fancy pens to show off, to entreating pen from others to write further From only physical strength was everything, to prioritising your mental peace above it all From finding good places to hide while playing hide and seek, to unconditionally smiling to hide the pain behind the sufferings From laughing with everyone, to fighting with your inner demon all alone. From being a kid who loved the bed time stories, to telling your pillow about your most recent heart break From outfit styled by mom was dope, to being clueless about what to wear in functions From not knowing how to speak, to guiding each other to reach peak From waiting for movies to get aired on television first, to binge-watching every movie and web series on Netflix and prime and getting immersed From dreaming of achieving your dream job, to sacrificing everything to fulfil our parents' wishes From didn't have any idea how to solve math problems to still figuring out how to solve it. From waiting for when we'll grow up to catch up with life because it's slipping soon.

We grew after all, isn't it?

Viresh Solanki 21SE09CE006 Computer Engineering



Creative Corner

School of Engineering

Photography



Harsh M. Mekhiya 21SE02CE026 Computer Engineering



Munjani Vinit 21SE02ML032 Computer Science & Engineering (MLAI)

Art



Chillimuntha Jothsna Sri Kathyayani 21SE02ML006 Computer Science & Engineering (MLAI)



Faculty Thinks

School of Engineering



Dr. Rohit Sunil Khedkar Associate Professor, Chemical Engineering, SoE

Chemical engineer matters to slow down global climate change



Engineers will play a critical role as the globe works to fulfill its sustainable coexistence goals in accordance with the earth's climate. Engineers are behind every machine, man-made development, and process that can directly or indirectly impact the environment, and it is through greater climate consciousness that engineers in 2021 will be able to design machines and work processes that, rather than having a negative impact on our environment, have a positive impact and move us towards a cleaner and more conserved environment.

The previous ten years may have been a decade of pollution and devastation that made us aware of the detrimental effects that human activity may have on the environment and accelerated the pace of climate change. The next decade is marked by a concerted effort to address the most serious challenges of climate change in order to preserve the earth's climate and allow humans to dwell in the biosphere for a longer length of time.

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P P SAVA

PP Savani University recognizes its role in preparing the next generation of engineers who are capable of not only creating advanced machinery and services for mankind but also taking a conscious step of positivity for the climate with their innovations as a premier engineering institution that trains the next generation of engineers through technical knowledge and practical skills.

Chemical engineers have been involved in the field of climate change mitigation in a variety of ways. Chemical engineers are involved in a wide range of industries, including fuel, food, industry, and medicine, and can have a positive influence on today's environment.

Chemical engineering is the collaboration of science to engineering, such as chemistry, biology, mathematics, and other common disciplines, in order to improve production cycles and design. It focuses on developing commercial products in the safest and most efficient manner possible. Chemical engineering may be used to create anything that contains synthetic substances or chemical processes, such as food, medicine, and cosmetics, and makeup.

Some plan and review industrial machinery, as well as the format of the machinery, in order to develop cycles and ensure that the production scale meets industrial safety criteria. They determine demand and how to supply it with cost-effective and waste-free production cycles, as well as to conduct tests to monitor conditions along the cycle. They can also assess and monitor the industrial equipment used in substance facilities. Some chemical engineers have worked in specialized production cycles or businesses, such as nanotechnology or the manufacture of polymers. They regularly collaborate with a variety of experts, such as mechanical engineers, to design and develop current industrial production methods.

Chemical engineers are assisting companies in harnessing various sources of energy to help address the energy crisis. In any case, while dealing with more common client goods, they create energy-saving production methods. They also assist in making energy harvesting methods as environmentally friendly as feasible given the conditions, as well as removing as much trash as possible. Nonetheless, they opt for the safest method of treating and disposing of trash generated throughout the harnessing phase.

Chemical engineers handle a variety of climatic challenges that have arisen as a result of industrial operations and people's daily lives. They develop cutting-edge technologies, testing devices, exhibiting procedures, and working methods that limit the amount and detrimental impacts of pollutants that enter the air, water, and soil.

Chemical engineers help to reduce the negative environmental impact of mechanical setups, power plants, and transportation vehicles, as well as allow for more substantial reuse of post-consumer and post-industrial waste streams.

Chemical engineers have long been on the cutting edge of environmental protection, devising complicated solutions to our most perplexing ecological problems.

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Chemical engineers were responsible for a large number of breakthroughs in the fight against pollution and environmental damage. More post-consumer garbage is being reused and commercial objects are being repurposed as a result of new manufacturing cycles. As a result, the water and air are cleaners. Chemical engineers have always been on the cutting edge of environmental protection. They work in groups with diverse industrial professionals to come up with practical solutions for the public that are in line with the welfare of our environment. They have an innovative perspective that straddles science and engineering.

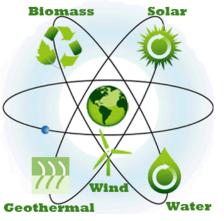
Here are a few examples of how chemical engineers are helping to save the environment by bringing sustainable improvements to the most frequent aspects of human life:

The unpleasant reality is that finite fuel supplies are depleting and will soon be depleted if we do not take action to save energy. Another aspect is that the combustion of nonrenewable energy sources produces toxins that pollute the air, water, and soil, harming the environment. Chemical engineers lessen the impact of pollutants on the environment and save fuel by working on cleaner fuels and creating energy-efficient procedures that may be used in everyday life. They have reduced the environmental impact of gasoline and dieselcontrolled automobiles, transportation, and trucks by planning more efficient motors that emit less hazardous pollutants. Vehicles, trucks, and public transit are essential for global transportation and freight delivery. Nonetheless, the fumes produced by the gasoline and diesel-controlled engines required to operate these cars have been a major source of pollution.

Chemical engineers, in collaboration with academics and other engineers, have devised strategies to limit the amount of pollution produced by oil-based, fuel-consuming motors. Chemical engineers aid in the efficient use of fuels while reducing pollution caused by them

by designing modified vehicular engines with more capable fuel-and pollution management frameworks, catalytic converters that remove pollutants found in emitted fumes, and advanced oil refining strategies that produce cleaner fuels for consumption.

Cutting-edge oil refining technologies are another way chemical engineers may assist reduce vehicle air pollution. Hydrotreatment is one approach, which uses hydrogen gas and an impulse to produce gas and diesel fuel with significantly lower sulphur and lead levels.



These technologies have made it possible to produce reformulated fuels that perform as well as traditional fuels while emitting lower amounts of pollutants.



Chemical engineers are attempting to tap into renewable sources of energy to engage in alternative energy extraction, in addition to utilising old sources of fuel in a cleaner manner. Chemical engineers devised the process to harness the sources and the judicious use of the energy harnessed from them, making the switch to renewable energy sources possible. A chemical engineer devises the procedure of harvesting solar power through photovoltaic

cells or the usage of wind to generate energy. Chemical engineers are important in the fight to lessen the impact of energy abuse on the climate, from processing cleaner forms of fuel like compressed natural gas to converting renewable omnipresent sources of energy.

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Climate activists are concerned not only about automotive pollution, but also about industrial air pollution. Emissions of air pollutants such as CO2, CO, SO2, and NO2 are responsible for not just increasing nations' carbon footprints, but also for phenomena such as acid rain, which is a direct result of climate change and may have a significant negative impact on human life and lifestyle. Corrosive fluids are formed when SO2 and NO2 mix with water, resulting in corrosive rain. Corrosive acid rain damages vehicles and structures, kills trees, alters the pH of lakes and streams, harming the aquatic life that lives there, and causes respiratory and other medical problems in animals, birds, and people.

Flue gas desulfurization (FGD) was invented by chemical engineers and is now a widely used method of reducing corrosive gases in released industrial wastes. The wet scrubber spray



tower in the vent or chimney is how FGD works. Corrosive gases are converted to non-reactive, innocuous salts during activity, which are subsequently isolated from the final emissions. Selective catalytic reduction (SCR) systems convert NO2 outputs to harmless nitrogen gas and water.

With all of these processes in place, chemical engineers are working on a variety of fronts to reduce pollution and climate change triggers. Chemical

engineers are getting more trained and prepared to combat climate change worries and preserve the globe as technology and science develop.

School of Engineering





P SA

Mr. Keval Jariwala Assistant Professor, Civil Engineering, SoE

હ્નેય સંગાથ તારો

તો દરેક પળ માં કંઈક વધારે જીવી જાવ છું

સી રીતે વ્યક્ત કરું તારા સંગાથ ની અસર બસ એટલું સમજી લે

કે સંગાથ તારો , આ શાંત મન ના

દરિયા માં ખુશી અને ઉમંગ ઓ ના મોજા જેવો છે

જે મારા મન ના કિનારાને હમેશા ભીંજાવતા રહે છે દરેક પળ તને કંઈક વધારે માણુ છું

છતા પણ રોજ આ મન માં તારી તૃષ્ણા જાગે છે.

સંગાથ તારો બની કૂલો સ્મિત નામના,

આ ચઢેરા પર રોજ ખીલી આવે છે,

જ્યારે પણ તને નીફાળું છું પ્રત્યક્ષ, કે મન માં તને

જો હ્રોય સંગાથ તારો, તો દરેક પળ માં કંઈક વધારે જીવી જાવ છું જો હ્રોય સંગાથ તારો.....

आसमान तुझे बनाके मे अपना बनाऊं एक आशियाना उसके नीचे कहीं देखता रहूंगा जी भरके तुझको तू प्यास वो निगाहों की वह जो कभी बुझे नहीं जाऊ में जहां साथ पाऊँगा तेरा हर कहीं आसमा बनाकर मे तुझमे खोंजाऊँ उसमे कहीं जो कभी सुना हो जाए मेरा ये आसमा मैं कुछ तारो से साजा दूंगा उसे दूर तुझसे, मुझे कभी होना नहीं आगर में ना रहु कल कही, तो बनके एक सितारा साथ रहूँगा उस आसमान में कहीं

Invitation for Content

School of Engineering

The students and staff members are cordially invited to contribute with the content for the upcoming issue of **"Tech**वतृम्"- *A Quarterly Institute E-Newsletter* to be published in **April 2022**. Kindly contribute as per the categories mentioned below.

Activities/ Events @ SoE

P P SAVA

- Academic Events (Conference, seminar, expert talk etc.)
- Technical Events (Engineer's Day, Tech Fest, Industrial Visit etc.)
- Cultural Events (Festivals, fresher/ farewell party etc.)
- Sports Events (Institute level, University Level Participation)
- Others (Women Development Cell, NSS, Marketing, Community Service)

Achievements @ SoE

- Curricular (Semester/Year Topper)
- Co-curricular (Tech Fest, Workshop, Debate, Elocution, Essay Competition etc.)
- Extra-curricular (Cultural & Sports Events within and outside PPSU)
- SoE Faculty Achievements (Presentation, Participation, Expert Talks)

Creativity @ SoE

- Creative Painting
- Original Poem/ Story writing
- Photography Corner
- Other Forms of design (web site, art and craft)

Innovation Corner

Innovative Ideas, Research, New Arrivals in the respective field (all branches) etc.

Faculty Thinks...

Short Motivational/ Inspirational/ Informative/ Intellectual articles

Students Thinks...

Anecdotes/ Experiences/ Observations/ Motivational messages

Kindly submit work/content as per the below guidelines:

- Submit your work on <u>techvrutam@ppsu.ac.in</u>.
- It is mandatory for students to mention name, enrolment number, Branch, Contact number, and soft copy of passport size photo in their submitted work.

Submission does not confirm publication. Submitted content will be reviewed by the committee for final publication.

For queries, kindly contact to: **Ms. Meera Patel,** Assistant Professors, PPSSoE



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