



# राइसग्यान

Wings of CHEM Knowledge



# CONTENTS

DEPARTMENTAL PROFILE

FACULTY PROFILE

RACE

GUEST LECTURES

CHEMFLARE

INTERVIEW DAZE

NOTEBOOK TO CANVAS

THE VISIONARY WE REMEMBER

PLACEMENTS

TECHNICAL WORK@CHEM-ENGINEERS

A JUNE-BYTE

అమృతు ప్రేమతో

SHAYARI

REACH US OUT-



## DEPARTMENTAL PROFILE OF CHEMICAL ENGINEERING

The Department of Chemical Engineering was started in the year 2012 with a UG programme in Chemical Engineering (60 intake). The Department boasts of a very efficient team of faculty with 6 Ph.D.s and 6 M.E. / M. Tech.s from premier institutions like IISc, IITs, BITS-Pilani and Andhra University. The faculty participates actively in state of the art research and continuously thrives to update knowledge and skills. The department is sanctioned with a UGC major research project worth of Rs. 12.39 lakhs and had completed consultancy project worth of Rs. 0.30 lakhs. The faculty members have expertise in core Chemical Engineering and inter-disciplinary research in the areas of Computational Biology, Bio-process Engineering, Bio-Fuels, Photo-Catalytic Degradation, Chemical Reaction Engineering, Membrane Technology and Industrial Pollution Control. The department has well equipped laboratories and equipment for inter disciplinary research in the fields of Bio-technology and Nano-technology. The major equipment are UV spectrometer, Bio-reactor, laminar air flow chamber, autoclave and the fermenter.



*Dr. Ch. Anil (HOD, Chemical Engineering)*

The students of Chemical Engineering are placed across various IT industries like Infosys, IBM, Mu Sigma and Ux Reactor and in core industries like Torrecid, Ocean India, Divis laboratories, Teejay India Pvt. Ltd., NCL and Deccan Fine Chemicals Pvt. Ltd. etc.. Students to their credit have won many prizes in curricular, co-curricular and extra-curricular activities conducted at various IITs, NITs and reputed institutes across the country. Students are also encouraged to study further for their PG and Research in India and abroad. RACE (Rays of ANITS Chemical Engineers) the student body of the Department of Chemical Engineering organizes a two-day National level Tech fest named "CHEMFLARE-2020" to exhibit their technical and non-technical talents. Team work among students is encouraged to inculcate positive work habits and passion to work wisely, creatively and effectively. RACE body recognizes its social responsibility by providing essential utilities and donations to an orphanage named "4 THE PEOPLE".

## Faculty Profile

**Prof. S. Subba Rao:** Major research interests include Bio-chemical engineering, Mineral processing engineering and Chemical reaction engineering. Worked on industrial fermentation for producing Citric acid, Glutamic acid, Immobilization of enzymes and whole cells, Reactive distillation and Grinding studies. Successfully completed a UGC Major Research Project entitled "Optimization of production parameters, extraction and characterization of a medicinally important drug Violacein by Solid State fermentation".

**Prof. V.Sri Devi:** Major research interests are Bio-Technology, Optimization of Bio-Processes. Currently working on isolation of novel micro organisms from various sources and their utilization to produce value added products.

**Prof. R.Srikanth:** Major research interests are Membrane Separation, Modelling & Simulation and Optimization. Currently working in the areas of modelling & environment. Worked on AICTE MODROB project "Development of analysis of oriented chemistry laboratory". Published 15 research papers in national and international journals. Member of Board of studies for JNTU Anantapur and CUTM.

**Dr. Ch.Anil, Associate Professor & Head:** Major research interests are in process modeling, simulation, optimization and control. Currently working on microbial fuel cells and desalination techniques to promote socio-environment technologies. Published various research articles related to Proportional Integral and Derivative controller settings for Jacketed Continuous Stirred Tank Reactor, Level controlling system in distillation column, Boiler steam drum, Paper drum dryer cans, Surge tanks and Bioreactors.

**Mr. M. Koteswara Rao, Assistant Professor:** Major research interests are in process modeling, simulation, optimization and control. Currently working on Proportional Integral and Derivative controller for MIMO systems.

**Dr. Anjali Dasari, Assistant Professor:** Major research interests are study of hydrodynamics of viscous oil water flow through various pipe networks, CFD simulations and water treatment techniques. Currently working on bio-sorption to treat pharmaceutical waste  
water.

**Mr.D.Guru Mahesh, Assistant professor:** Major research interests are Fermentation, Molecular Biology, Bio-chemistry, Biology, Human values, Bio-informatics, Molecular Docking. Successfully completed a UGC Major Research Project entitled "Optimization of production parameters, extraction and characterization of a medicinally important drug Violacein by solid state fermentation". Published various research papers related to optimization of fermentation medium for the production of ethanol from jaggery using Box-Behnken design.

---

**Ms. S. Harika, Assistant Professor:** Major research interests are in battery technology, water treatment techniques. Currently working on phase change materials for LIPO cells.

**Dr. K. China Malakondaiah, Assistant Professor:** Major research interests are electro-chemical techniques for ceramic and composite membrane fabrication for water purification. Presently working on bacteria removal from synthetic solutions using low cost laboratory fabricated ceramic membranes.

**Mr. B. Pradeep Santosh Kumar, Assistant Professor:** Major research areas of interest include Chemical Looping Combustion, Under Coal Gasification (UCG) and Synthesis of Effective Adsorbents. Currently working on photo-catalytic degradation of heavy metals and pathogens present in contaminated drinking water using provokisites.



# RACE

## (Rays of ANITS Chemical Engineers)

Rays of ANITS Chemical Engineers or shortly known as RACE is a student association of the Department of Chemical Engineering which has been successfully empowering students since 2015 by providing a platform to improve and display their curricular, co-curricular, social and extra-curricular skills both educationally and recreationally. The main objective of RACE is to plan and take lead in various activities and events that enhances the students' will power and instill confidence in them to overcome their fears and face new challenges in the society.

The RACE association is guided by the department's esteemed faculty members who put all their effort and time in guiding the members of the RACE body to make the events successful. From the time of its birth the RACE body has conducted various national student conferences, interactive sessions with eminent personalities and various activities which bring out the inner talents of the students.

The following are the various activities conducted by the RACE during the academic year 2020-21.

**INDUCTION PROGRAMME:** The first year students need to be more comfortable and actively interact with other students by overcoming their ambiguities, so the RACE body has conducted a one week interacting session with the first year students as a part of the fresher's event. The members of the RACE have conducted various activities like group discussions, debates and situation responding challenges so that the students would overcome their fears in expressing their thoughts and be in par with the others.

He also emphasized on career opportunities in fields of chemical engineering and its related growth. Then he introduced all the faculty members to the students. Later a small documentary video on the basic difference between chemistry and chemical engineering has shown to the students. The head of department ended his speech with best wishes during their four years of stay at ANITS.



**ENGINEERS DAY EVENT:** On the eve of the Engineers Day the RACE has conducted various co-circular activities like Group Discussions, Debate and Art Competitions on 9th September 2019. Students from across the departments participated in these events and won several prizes. The revenue generated from this event was donated to an NGO called STREET ORGANISATION which takes care of homeless people across Visakhapatnam

**SPOORTHI ORPHANAGE:** The RACE body collected funds from students and faculty and visited the "4 the people" organization along with some students where the orphan children are given meals. The students interacted with the children by teaching classes, conducting games and other activities like singing and dancing. The children were filled with joy and the students enjoyed every moment with them.



RACE Body Members



## The so-called student life

Often, we students are pressurized in every part of life, whether be parents taunting, sometimes teachers humiliating, friendship horrors, targets to reach, promises to keep, and so on...

Nowadays student has the right to enjoy their education and the saddest thing is barely people do it. Education is not only what you study in a classroom; stuck in the middle of 4 walls, is it? Education is something that pops up the skills in us.

We will take an example; PIZZA!! Do you like it? Definitely, most of us do like it, isn't it?

So, the education and degree are just a wheat base with crest may be the foundation, the thick you are the full you are, what adds is the taste is the topping, right? So, these toppings are the skills you put on yourself just to be complete as you cannot be full with just a base crest. LOL!

So, to add up this; student life is the best opportunity to sharpen our skills. This phase of life gives us many chances to do mesmerizing things.

Alas! Apart from these things let's get to know how to live in the outside world. Student life generally gives us many do's and don'ts, but that doesn't mean we should not be a part of actual life. Am sorry! But we need to be trained to do some things like at least helping our fathers calculate the tax, fixing up bulbs and other essentials in the house, and learning new things. At least we as students have the responsibility to learn and not to do any work half-witted.

**PAIN TODAY! PRIDE TOMORROW!!**

*-G. Vaishnavi, (III/IV, B.Tech)*



# Brothers

There is a family in which had 2 brothers, mom and a father. These brothers was always used to be like friends in every time in which they share every situation that they face in daily life and these brothers are like tom and jerry in which they always used to have silly fights in a sarcastic manner. On a fine day the elder brother was planned to bunk the college and wanted to watch his favorite star's movie but there is a younger brother who asked his brother to take with him otherwise he used to leak the plan to his parents and then the elder brother doesn't have another option other than taking to the movie.

After some days this time the elder brother got a chance to take revenge on his brother by getting his report card into his hand and this time the younger brother doesn't have other option other than surrendering to him this time the

*-Radha Sai, (III/IV, B.Tech.)*



## Success Lessons from Virat Kohli

Virat Kohli is known to be the best modern-era batsman; therefore, he is addressed as a legend in Indian cricket. Well, nothing was given to him; he earned everything with his dedication, hard work, passion and love for the game. Not many people become an inspiration but Virat Kohli is an inspiring personality to every young boy or girl who wants to achieve greatness in their life. There is a lot to learn from him and his lifestyle. The 5 success lessons we can learn from his life and apply in our life as well.

### 1. Never Give Up Attitude

One thing which has helped Virat Kohli to reach success is his never give up attitude. He fights till the last ball of the match for his nation and his team. He is the reason why every current player in the Indian cricket team has a fighting attitude. He believed in fighting for the win instead of losing hope and giving up early.

### 2. Leading from the Front

Since Virat Kohli was named as the captain of Indian cricket team, his game sense and level of performance increased dramatically. This is the sign of a true leader. Under the leadership of Virat Kohli, team India is ranked on first position in every format. Every young boy or girl should develop a sense of responsibility if they are willing to become a great leader one day in their respective field.

### 3. Never Back Down Mindset

Being a typical Delhi boy, Virat Kohli doesn't know how to back down from a fight. During early 2000, Indian team used to get bullied by teams like Australia, England and South Africa but since Kohli began playing regular international cricket he started giving back to them. This is the reason why Team India is at a dominant position in world cricket now.





#### 4. Self-motivated work ethics

Being successful is never easy and if we are willing to achieve greatness we have to pay the price first. It all depends on our hunger to succeed and the price for this has always been self-discipline and our work ethics.

One of the biggest factors in the success of Virat Kohli was his extreme self-discipline through his rigorous work ethic. When Kohli made his debut in the Indian cricket team he looked like a spoiled brat but after the 2011 world cup win, he channelized his raw aggression and anger into a well-disciplined mindset which is required to be the best in the game. It might sound extremely difficult but once we get used to it we will have unlimited benefits.

#### 5. Undying passion and will power

Passion might sound like a fancy word, but if we want to understand the real meaning of passion look how Virat Kohli plays a game. He proved his will power and passion when he came to bat after the death of his father and played a match-saving knock of 90 against Karnataka in Ranji Trophy.

If we are passionate about what we do, nothing can stop us from achieving greatness. There is always a way. One thing which every young boy and girl should keep in mind that when you blend our passion with undying will power we become unstoppable.

We have only seen Virat playing on the field but not his training which he does off the field. Greatness will always come for a price and if we are willing to pay that price than success will follow us.

Finally every cricketer had bad phase in his career, we need to support in that situations. They gave lot of movements to enjoy to us, we need to remember that. Even in our life there will be bad phase or bad situations, we need to backup ourselves .....

## Guest Lectures

### Webinar on “Fundamental Aspects of Scale up”

Department of Chemical Engineering, ANITS in association with IIChe student chapter ANITS organized a online webinar on “Fundamental Aspects of Scale-up” by Reinaldo M.Machado, Visiting Professor, Arizona State University, USA though online on 23/03/2022. In this lecture Mr. Reinaldo M.Machado highlighted the fundamental aspects of scaleup, mass transfer theory and equipment, scale up and scale down, mixing process and crystallization. Dr. Ch. Anil, Head, Department of Chemical Engineering, faculty and students participated and benefitted through the lecture.



### Webinar on “Overview of Indian Petroleum Industry”

Department of Chemical Engineering, ANITS organized a guest lecture on “Overview of Indian Petroleum Industry” by Mr. K. Praveen Kumar Reddy, Manager, National Council for cement and building materials, Delhi and Mr. G. Jaya Chandra Naidu, General Manager, National Council for cement and building materials, Delhi though online on 15/02/2022. In this lecture Mr. K.Praveen Kumar Reddy highlighted on short term and long term diploma courses in petroleum industry, Indian scenario in Petroleum Industry. Mr. G. Jaya Chandra Naidu emphasized on raw materials, manufacturing process, different catalytic beds used in Petroleum industry and also on types of fuels. Dr. Ch. Anil, Head, Department of Chemical Engineering, faculty and students participated and benefitted through the

## Chemflare 2k20 – The Tech Feast

The Department of Chemical Engineering, ANITS, Visakhapatnam, in association with RACE (Rays of ANITS Chemical Engineers) & ANITS IChE Students chapter under Walter Region Centre was organizing a two day National student conference, "CHEMFLARE-2020", during 19th and 20th February 2020. The chief guest of the inaugural function is Sri G.S.V.S.S.S Prasad Sarma, Executive Director (Retd.), Visakha Refinery, HPCL, the guest of honour Mr. Naveen Neerukond, Treasurer, ANES, Prof. T.V. Hanumantha Rao, Principal; ANITS is the president of the function. Dr. Ch. Anil, Head of the chemical Engineering department and Mr. B. Pradeep Santosh Kumar, Faculty convener, Mr. J. Sashidhar Student president RACE body are also present on the dais.

Prof. T.V. Hanumantha Rao, in his presidential remarks informed the students that, the change in technological trends are taking place, the growth and transform in process industries are fast. The students need to foresee these changes should be updated with computational skills, optimization and data sciences. He also emphasized the importance of sustainable development, zero discharge, waste management and advised all the chemical engineering students to work in these areas.

Mr. N. Naveen, the Guest honour, advised students to be actively involve in workshops, conferences, technical fests conducted. He informed that, the chemical engineers are good at cause and effect of the process. He advised students to be like bigfish in small pond but not like a small fish in a big lake.

Mr. Prasad Sarma, the Chief Guest, highlighted the difference between the academic environment and industrial environment. Teaching faculty, friends, supporting system etc. will help the students in academic environment, whereas, the more competition will prevail at industrial environment. The human skills, technical skills and delivery skills will be dominating the industry environment. He emphasised the importance of IQ, EQ and SQ in industry. He also emphasised that the future is for Eclectic Vehicles, Catalysis, Biotechnology and Nanotechnology.



HOD, Dr. Ch. Anil, in his address expressed, the department will always encourages students to participate in various technical and extra-curricular activities. He also informed that, such events and activities will be organized in future also for the benefit of the students. Mr. Pradeep, Convener, informed the activities of the CHEMFLARE-2020. Mr. J. Sasidhar, Student president, gave the information of the RACE body activities. Prof. S. Subba Rao, Prof. R. Srikanth, Dr. M. shiva Naresh, Mr. K. Koteswara Rao, Ms. S. Harika, Dr. K. China Malakondaiah,, Dr. D. Anjali, and Ms. P. Mallika Rani, other supporting staff, and Students were present on the occasion.

#### MODEL EXHIBITION:

The main dictum of this event is to make students enhance their basic chemical engineering knowledge by shaping their ideas in the form of sophisticated models. Prizes were distributed to the best models which sustain to the modern technologies.



#### PAPER PRESENTATION:

The main dictum of this event is to introduce the latest trends in research and technology and also to develop the presentation and communication skills of an individual. Students showed their mettle during the chemflare 2k20 around 30 papers were presented. The event was conducted for a period of 2 days.



#### POSTER PRESENTATION:

The main dictum of this event is to enhance the students to showcase their creative skills. Posture presentation is a key component of communicating science and an important element in successful career.

#### CHEM-E-TRICKS:

This event was conducted by students to showcase the beauty of chemical reactions. They showed how exhilarating the outcome by performing some tricks like elephant tooth paste, sanitizer paper which was not flammable, fake



# Non-Technical Feast

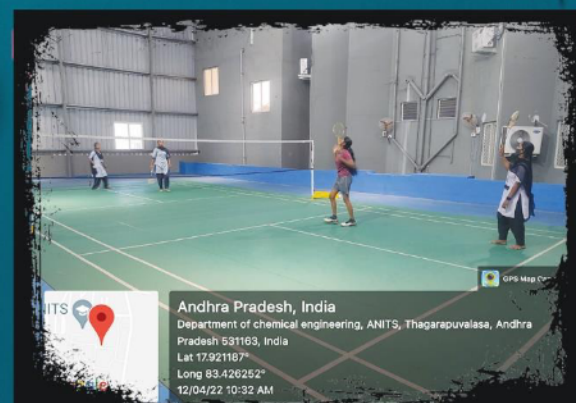
## CULTURAL EVENT :

Many students have shown up their hidden talents to boost up the energy and refresh. This event had classical dance, western dance, singing and dialogue delivery.



## KHELO CHEM:

In this event sports were conducted for the students in the department to encourage extracurricular activities. Outdoor sports like badminton for both boys and girls and volleyball. In category of indoor game chess was conducted. Winners and runners were awarded and appraised.





## National Cadet Corps



I am CDT T.MANIKANTA I am here to share my NCC experience. NCC is all about unity and discipline. It is an organization which offers us ocean of opportunities and a platform to showcase our talents.

Being an NCC cadet I attended many fallins, Rallys and social activities, I learnt about unity and discipline, how to be punctual and responsible. The life as cadet is one of the best experience I ever had. Being a part of Drill class, I learnt about unity, co-ordination, attention and teamwork. I have gained in all aspects about life from theory classes. Handling weapons made me a proud individual when I suffered with sciatica pain I am unable to do moves in drill, when I explained it to the sir, WO sir gave me permission and encouraged a lot and told me to observe the drill movies and cover the theory part.

I have developed social skills by meeting people with common interests. NCC has been a boost to my self-confidence and esteem. Having this experience, I'm now providing awareness among the youngsters of my village to be a part of it. I have created a bunch of memories in this journey specially during camping (last day RAGADA is unforgettable) cleaning programs, tent pitching, etc... I feel extremely privileged to be a part of it.

Good health is only the real wealth, Fitness is very important to be healthy, Fitness of our mind and body makes us healthy, Everyone must develop the habit of doing exercise daily and should sleep for 6-8 hours daily. NCC has been a boost to my self-confidence and esteem. Having this experience, I'm now providing awareness among the youngsters of my village to be a part of it. Healthy and fit people live a happy life.

*-T Manikanta, (IV/IV, B.Tech.)*



## THE BOY

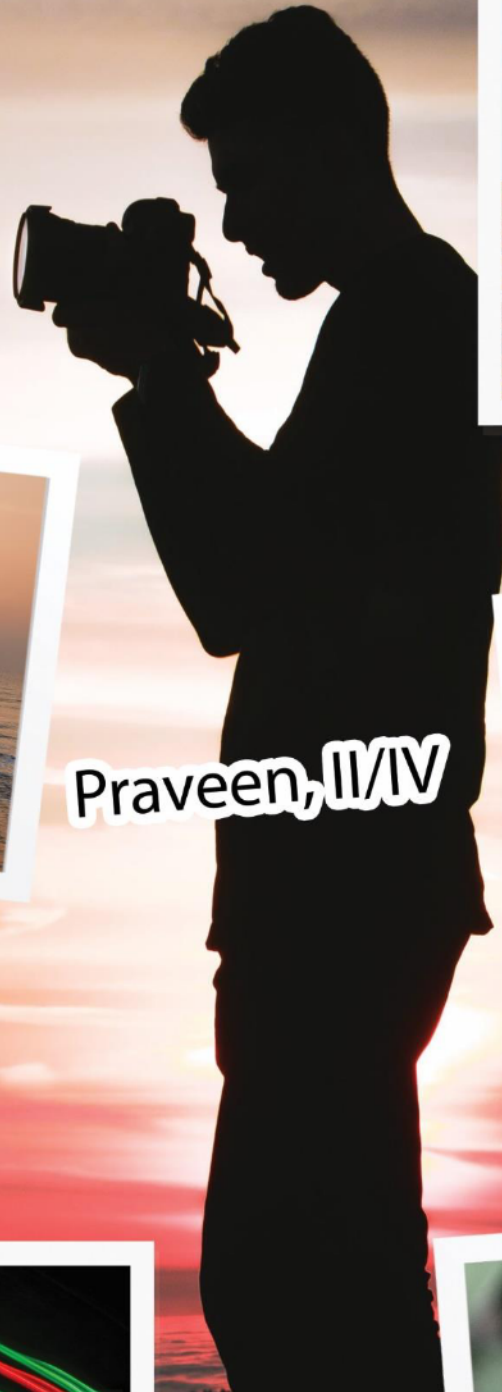
There was a boy who was a teen and lived in Coastal area. On a day before a New Year, he and his friends had planned to go to beach on night to celebrate New Year and they gathered to celebrate at beach the time had come to enter into the next year then the people around him started yelling Happy New Year with his friends he also started yelling Happy New Year and then suddenly he saw a boy who was similar to his age who was looking at them and then the boy stopped yelling and he also started looking at that boy and he realized that why the boy doesn't have the same facilities that he has and started thinking about it and there after he became an actor and started his social activities by service by keeping a trust for the common people and later he became a politician to serve people in a large scale but he didn't get chance to do but still he was trying to do without giving up.

And the boy who becomes an actor and a politician was Pawan Kalyan and this is one of the incidents that he faced in his past life.

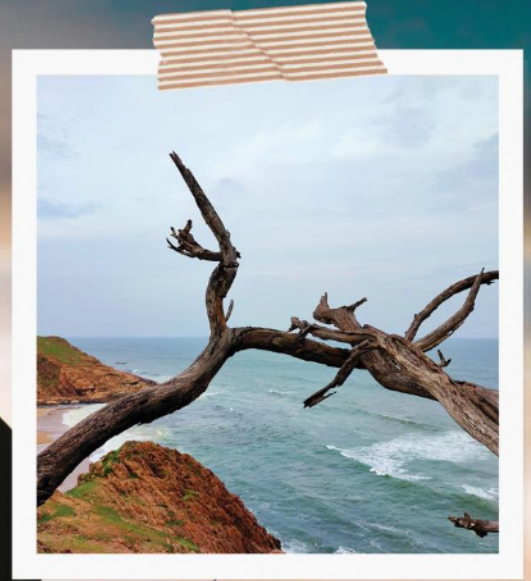


*-Radha Sai ( III/IV, B.Tech.)*

# CHEMINEER CLICKS



Praveen, II/IV



Sudarshan, IV/IV

# Values of Life

Once there lived a king, he had everything he wished for, but one fine day three questions came across his mind. The questions were:

1. What is the most important time?
2. Who is the most important person?
3. What is the most important thing to do?

He became pretty restless and to find out the answers he went to his ministers and asked the questions. The ministers after listening to his questions replied, “Oh, your holiness the most important time is the time you became king”. To his next question they replied, “You are the most important person because you’re the king” and to his last question they replied, “King, expanding your kingdom it is the most important thing to do”.

But the answers he got didn't satisfy him. Realizing this minister got worried, as now his job was in danger, so he suggested the king to meet the sage who lives on the mountain at the edge of the kingdom.

The minister knew these questions are deeper questions and only that sage could answer them. The next day the king goes along with his twenty soldiers and reached the mountain by the dusk. He thought it would be inappropriate to meet the sage with so many soldiers so he ordered them to stay behind and started to climb alone. As he reached the cliff he got very tired, but somehow he reached the cave where the sage was meditating, so he waited for him to complete the meditation, but after a long three hour wait the sage didn't wake up and thus king decided that he would spend the night there and in the morning he would ask the questions. So, he puts down his turban, sword and goes to sleep.

The next morning he wakes up with the sunlight streaming into the cave with beautiful birdsong and fresh air. He gets up, rubs his eyes and alarmed to see that the sage is not there. So, he walked out of the cave and goes to the edge of the cliff to see the glorious sight, he could see his whole kingdom from there. He was amazed to see his glorious kingdom and the beautiful sight brings a huge grin on his face. In his palace every morning was so different, the first thing he gets is bad news, all his ministers and spies would come and tell him what wrong is going on and tension...tension...tension!

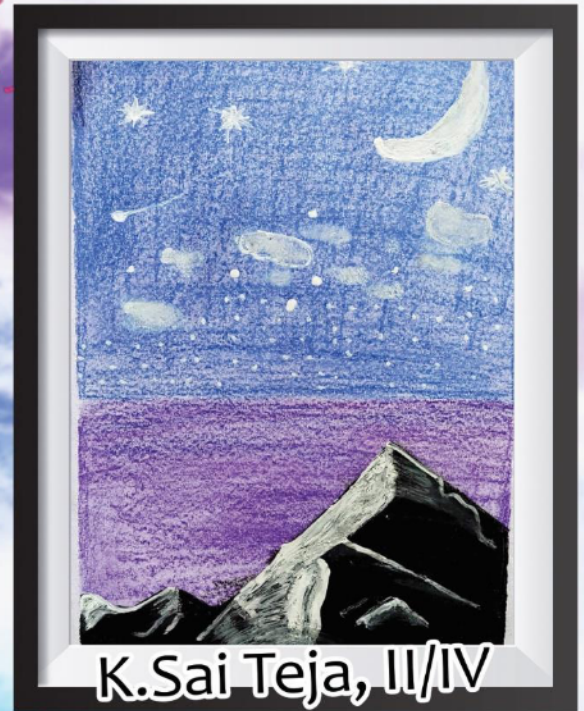
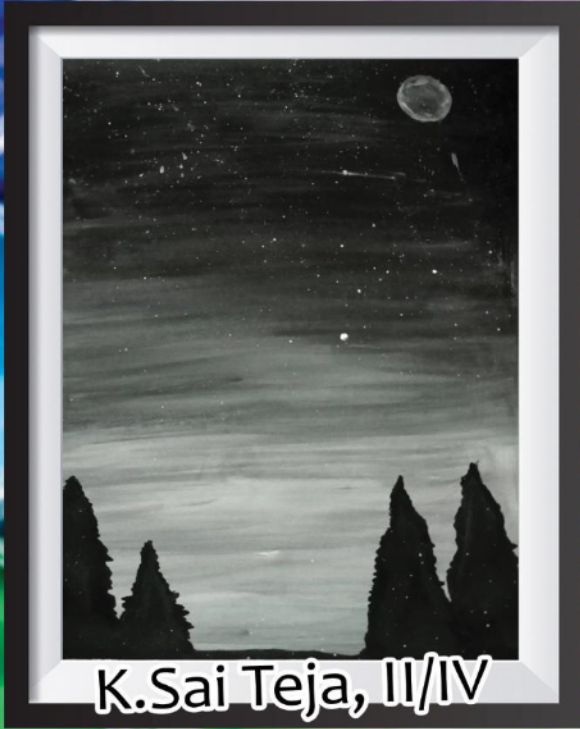
s i o n !

But as he is standing there on the edge of the cliff and admiring his kingdom, his heart just connects and realizes that this is why he is the king, to serve all these people. Just then he realizes someone patting his shoulder, the king turns around to see the sage standing there, he has king's sword pointing

at him and looking deeply into king's eyes and the sage says, “King, tell me, what is the most important time? Who is the most important person? & What is the most important thing to do?”. These three questions hit the king and a twinkle comes into his eyes. The sage realizes this man has got it, so he puts the sword down and says, “King, now you can go and rule your kingdom.” That's the story! Now you might be wondering, where are the answers are? You should deeply think about these questions. If you were the king what will you say, standing on the cliff,



# NOTEBOOK TO CANVAS



## Dear me in 5years

Me getting up early just to enjoy the morning sunrise with my coffee... HuH! yess!! This can make my day better even. Taking a drop breath in and out letting all my exhaustions go away for a moment and curving my lips to be confident and energetic throughout the day. Now i start, where I am? Am now at a verge of experiencing new things on my own. Not depending on anyone just for my needs. Spending my own money on my wishes and also saving up for better future. Satisfying myself and also people around me. Coming across mant hurdles was not as easy, it taught me not to believe anyone more then yourselg, not to inculcate hatred towards anyone, loving yourself, loving people by whom you are loved, being patient for your time to come, and mostly believeing in KARMA... HAHA! Thats true even. I just still think how time has passed, how I have changed? No matter what consequences in your life make you strong, every level in the life demands a new you, shrugging off all these thoughts in my head, smiling again and ending up to start my routine gor the work was as usual as it was and as it is and as it will be.

*-G.Vaishnavi,  
(III/IV, B.Tech.)*

# Life on Mars

Human beings are curious to explore new things. Two million years ago humans evolved in Africa and then slowly spread across the planet. Some of the greatest advances in civilization and technology came because we explored. Now, Scientists have to plan to settle our lives on MARS. But the really question is “CAN WE REALLY SURVIVE ON MARS ? ” and the answer is YES ,but it takes a lot of changes to the planet as well as to our genes.

There are many challenges to survive on Mars. Mars is comparatively very small in size than Earth and it's atmosphere is completely covered with carbon dioxide. The atmosphere on Mars is really thin (100 times thinner than on Earth) and it's not breathable, as it is covered with 96% of CO<sub>2</sub> and the temperature is so cool. The average temperature is -81°F. Mars has less gravity(38%) than on Earth. The minimum distance from Earth to Mars is about 54.6 million kilometers. Even we jumped into the faster spacecraft ever launched from Earth getting there would take 9½ months. Even through if we land on Mars we finally see dry and lifeless Mars on the horizon.

We need to recreate everything on Mars. As a human being we need to fulfill our basic requirements like food, shelter, clothing, water and oxygen.

There's no fertile soil on Mars to grow food, instead we had use hydroponics cultivating crops in a mineral and nutrient solution. But we can't grow more than 15-20% of our food, at least not until water is running on the surface of Mars. In mean time, most of our food will arrive from Earth and it will be dried.

There is too much solar radiation and too much radiation from cosmic rays. We can use inflatable pressurized building as well as landers themselves. But this works only during the daytime. So, we'd go underground to live because Mars has no global geomagnetic field.

If we wanted to go outside and return alive, we need a spacesuit to make up for the near absent atmospheric pressure and to block radiation. It also keeps us warm as the temperatures on Mars are too cool.

Mars looks like the desert. But it turns out not the soil alone, on Mars contains up to 60% water. Orbiters tell us that there is huge amount of underground water on Mars as well as glaciers. There is a plenty of water in mars but most of it is ice and most of it's underground, it takes a lot of energy to get it. Waver is a device which is a low-tech dehumidifies and it turns out the Mars atmosphere is often 100% humid so it can extract all the water. The mars atmosphere is very thin and it's 95% CO<sub>2</sub>. So, we can extract O<sub>2</sub> from CO<sub>2</sub> with machines like NASA's Moxie (reverse fuel cell) it sucks the Martian atmosphere and pumps out O<sub>2</sub>.

*-K Sandhya, (IV/IV, B.Tech.)*

## My Catalyst

This is Neel's Story which describes quality of Friendship

There was a guy called Neel who completed his 12th class with very lower grade. so, he was depressed. An Introvert character walking behind the sea, where the breeze is very fast and the guy was thinking about his future after 12th class and his parents were very supportive and encouraging by saying

IF YOU WORK HARD IN YOUR GRADUATION YOU WILL HAVE BETTER FUTURE.

So finally decided to join in 3 years degree course in a unpleasant mood. One fine day he was ready to join in 3 year programme but an energetic old doctor suggested to join btech so that Neel's life will be better said to Neel's father. After lot of struggling with Neel his father joined doubtfully (whether he can clear btech or not?) btech chemical engineering. So now Neel was in btech 1st year with fear as he got less marks in 12th grade and he was thinking like whether he can manage or not. So his first class was drawing in btech 1st year and was 3 hours class and he was nervous because he is very poor in drawing

As he is already in depressed state he was more depressed by drawing subject. He tried to learn but he didn't finally 1st year result came he failed in drawing. So he underestimated himself and his parents also sad. Neel came to 2nd semester and one fine day he was watching a young man sitting on the stairs and drawing graphs in a logical way. So Neel approached him, the young man was logical and decent. The entire situation was in lab where Neel doesn't draw any graphs. So the young man called Sudharshan helped Neel. So these both exchanged numbers and became close friends.

Mr Sudharshan helped Neel a lot and lot as he can. Neel and his buddy Sudharshan met a man who was very particular in every aspect of life. He is energetic, humble and funny so finally He is Aniketh

Neel, Sudha, Aniketh became best friends, These both guys helped Neel in every situation of life with this positive vibes Neel cleared his drawing exam and successfully completed all the 7 semesters (This was typed when 8th semester is going). Sudharshan and Aniketh built very good confidence to Neel

MEDICINE ALSO HAS EXPIRY DATE LIKE THAT ANIKETH NEEL AND SUDHARSHAN CHOOSES DIFFERENT CARRER PATH

FINALLY ALL ARE SUCCESSFUL

WE CAN BE IN ANY COUNTRY OR IN ANY LOCATION THE SMILE I GET ON MY FACE WHEN HEAR THOSE NAMES WAS PRICELESS

FINALLY MANUFACTURE TO EXPIRE YEAR [2018-2022] BUT QUALITY FRIENDSHIP NEVER ENDS

THIS IS B.V.N.S PAVAN KUMAR SINGING OFF

*-B.V.N.S.Pavan Kumar, (IV/IV, B.Tech.)*



## The Visionary *...we remember*

He promised us that he won't leave. But now we were all alone here, he was nowhere. Our eyes are all red because he was long dead. Once who were blessed with a soul, can never again feel whole.

Dr. M. Shiva Naresh sir, born on 1st June 1980, he pursued B. Tech in chemical engineering from JNTU, Hyderabad. Pursued his M. Tech in biotechnology from Andhra University. He completed his Ph.D. in chemical engineering from IISc, Bangalore. Title of thesis at his post-Graduation is Optimization of lipase production from *Yarrowia lipolytica* using RSM and artificial Neural Networks (ANN). Title of his Ph.D. thesis is Theoretical studies of mechanisms of viruses entry into cells. He started teaching from Feb-2006 to April-2016 as assistant professor and as associate professor from May-2016 to April-2021. He had been a major asset in the development of the Chemical engineering department, ANITS.

Right from the beginning, "Make it simple" he said, when one of the students was sophisticated in a problem given. He always insisted to everyone that either life or education deal in the simplest way that it should be dealt. Right in the middle, Once, a group of students had gathered in the ground, everyone watching them were quite amused, "what they must be doing?", they don't know a person standing in middle of them was playing with them. That's the way of his teaching. He lived in his work, he lived in taking the subject to everyone's mind in practical approach. Right till the end. His way of living provoked many, he had always shared his knowledge to everyone, he had always expressed his thoughts to younger minds and had always lived as the simplest person that one could live.

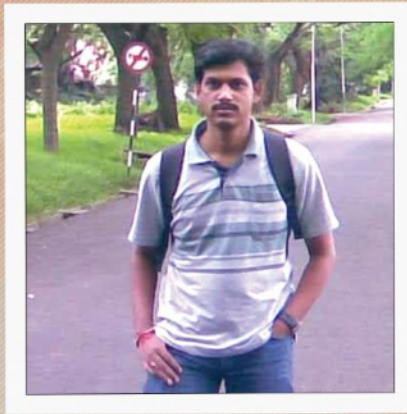
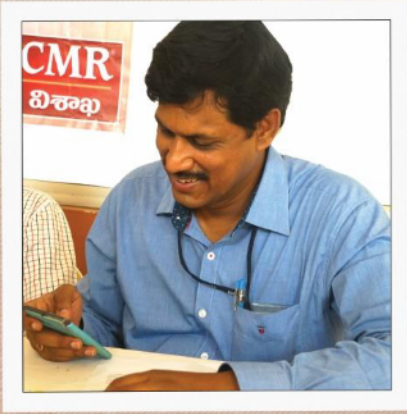
It's been a year since he left. Still, the pain and emptiness do not go away. Every occasion had been different without him and would always going to be different without him.

He always guided us when we were lost. He taught us, mentored us and made us what we are today. We can never forget that. He always made a classroom brighter with his knowledge and wisdom, that would definitely be gravely missed. If he was here, he would have said, don't look in the past and look out for the future. We would surely follow his wise and generous words.

Maybe that's what he did, leaving us to think what a Guru meant. Maybe that's what death does. It challenges the lives it left behind, every single day. We miss you sir.

-T.V.Anudeep Naidu  
Student, (2018-2022)

# Memories with him.....



One thing I learnt from Shiva Naresh sir was to be competitive. To never give up. And to adapt to your surrounding. As a teacher and a colleague, he taught me to be the person I want to be and be assertive about it. The other thing I learnt from him is how much a teacher can influence a student and all that requires is to have confidence on ourselves and the student. I will never forget him and so will all his students

-Suchitra Bandi  
Asst.Professor

Your Presence makes us wise. Your absence makes us unpredictable. But still your memories and teaching are moving in front of our eyes. The inspiration you give as a teacher is infinite. Your activeness that always promotes something new. The enthusiasm you show for the talent you seek from us is unforgettable.

-T. Sai Kiran  
Student, (2018-2022)

Dr. Shiva Naresh is a complete human being. He is innovative, motivate, highly disciplined, knowledgeable, obedient, hardworking and was always down to earth. He is a role model to all students. Loss of Dr. Shiva Naresh has affected family, friends, students and to the institute. He lives forever through his spent days in the hearts of students and everyone.

-V. Sridevi  
Professor, Anits

Everyone knows Siva Naresh sir as a great lecturer. He indeed is. As a student who had that privilege to sit in his classroom, I doubt if I did enough justice in learning the lessons he taught. His happiness lied in classrooms that had answers. Not just any answers, he looked for answers that had zeal. The one's which aren't based out of textbooks but with knowledge that came from basics. And that explains why his classrooms are the best experiences we had as his students. To not just learn lessons but to see them in our very own lives is the greatest blessing he gave to us. And hence even today, we do not find it difficult to figure out answers to our questions, because he helped us realise that the very answers are right here, in the basics around us.

-K. Reshma  
Student, (2017-2021)

M. Shiva naresh. The one who was reason for students to pick the complex subjects as their favorite ones. His passion towards teaching gives students a new interest of sticking with core knowledge for their whole lifetime. What makes his class as a much interested one? I can say that, He is the one who explains degrees of freedom as " family planning = couple +2". Simplifying Maxwell's equations into " Great physicists have studied under very famous teachers". From biriyani mass transfer to whole chemical engineering. What not! I believe that his memories and his motivation run throughout my life. I can simplify M. Shiva naresh sir as a mine of knowledge. My favorite teacher.

-Ch.Sai Kiran  
Student, (2016-2020)

I would like to share my memories with one of my favorite teachers and the bond I have shared with him. I was fascinated by the term Chemical engineering right from my Class 12 and wanted to make a career out of that. I along with my father went to meet Shiva Naresh sir in college. After nearly an hour of insightful conversation with him, I made up my mind that I'm going to opt for ANITS. That one hour was probably the most insightful discussion I had in my life till then. I was awestruck by the way how sir was able to explain chemical engineering as a whole to a fresher using common examples. During his lectures, the way he used his techniques to help us concentrate on the topic is unbelievable. He could easily inspire anyone who is willing to do big things in life. He used to talk a lot about how we must run behind knowledge and not solely on grades or marks as the former skill helps when we begin to work. Though he has taught me for just a semester, whenever I meet him he would tell me about the various internships and courses which I can pursue to enhance my skills and how they help me find better employment opportunities. When I was selected for TCS he was one of the first to congratulate me. He always used to say that if you keep working hard on the process and the results are inevitable. Although he isn't there today physically, his words actions, and thoughts will always resonate with many of his students

-P.Abhishek Reddy  
Student, (2017-2021)

## Days of Future Past - Alumni Meet

What's more good than relishing the memories of the past, those happy moments spent together remembering them again is honestly a treat. The department has organized the 1st Alumni meet on 5th February. The motto of this event is to collect feedback on the department, feedback on course structure, extended support to the department and their well-being. The event started with the remembrance of Dr. M. Shiva Naresh Sir wherein all maintained 2 minutes of silence to pray the almighty to endow him sadgate. The alumni introduced themselves with their present and previous professions and their nature of work presently doing. Our HOD Dr. Ch. Anil Sir asked the alumni to give their feedback on curriculum and activities to be conducted to uplift the skill set of present students wherein they suggested to include courses like python and even suggested to conduct lectures related to the latest trends in the chemical industry and few even mentioned to arrange for collaborative projects for students and full semester industrial training to have a feel of industry before the student leaves the college. To mark the end of the event, the alumni thanked the department in organizing its first alumni meet and bringing them together and sharing their views. Alumni meet brings old memories together, and they go down the memory lane to experience their golden days of their life.





# DEPARTMENT of CHEMICAL ENGINEERING



# SMS Pharma - Internship

We lack practical experience and internship is the only way to get it. The best practical exposure comes from internships as we get to do a bit of everything. We get to see and experience the different roles that people play in certain companies and see working life from different perspectives. This is good to take into the working world with us.

An internship allows us to take time to understand your role, tasks and the industry. And it will leave knowing more than we came with, and this is most likely the outcome.

We did an internship at MAHI DRUGS PRIVATE LIMITED which is under SMS Life sciences India in the month of September 2021.

SMS Lifesciences India Ltd, maker of active pharmaceutical ingredients, said on Friday it would acquire Mahi Drugs Pvt. Ltd, which manufactures APIs as well, for an undisclosed amount. In its meeting, the board of Hyderabad-based SMS Lifesciences has considered the due-diligence report and approved the acquisition, the firm said in a BSE filing on Friday. In its earlier meeting on 8 February, the board had weighed buying the firm. Visakhapatnam-based Mahi Drugs was incorporated in 2012.

As an intern, we discovered it's essential to be enthusiastic and open to learning new skills, asking for more work and being curious to learn and ask questions. During my internship, I took notes every day about new things I learned. This helped us understand more and identify the areas that I needed to improve in. My internship helped in developing skills and expertise. As Interns we are given responsibility for providing field support or carrying out significant research.

As interns we get to interact with prospective mentors, establish meaningful relationships with their fellow coworkers, and learn the inside trade of chemical engineering. We are responsible for designing and creating chemical processes for a wide array of manufacturing products. A chemical engineering internship indeed enables you to learn and acquire a plethora of skills ranging from technical, scientific, problem-solving, and interpersonal.

*-V. Sindhuja, (IV/IV, B.Tech.)*



## Mock Interviews

To make the student's interview ready the department has organized a mock interview session via Google meet wherein the alumni of the department actively conducted an interview session to enlighten the minds of students who would be facing their first interview.

Students actively interacted in this session; put forward their doubts and all their queries. The main motto of this mock interview session was to boost the confidence of the young minds so that they could perform well in the main interview.

*-BVNSG SUDARSHAN, (IV/IV, B.Tech.)*





# Mr. SUIII CRISTIANO RONALDO

Madeira, Manchester, Madrid, Turin, and Manchester again ... Reaved in red... Restored to the great gallery of the game, A walking work of art... Vintage... Beyond valuation... Beyond forgery or imitation... 18 years since that trembling teenager of touch and tease first tip-toed on this storied stage... Now he is in immaculate maturity C R 7 Reunited

Cristiano Ronaldo dos Santos Aveiro who is commonly known as Cristiano Ronaldo was born on February 5, 1985, in Funchal, Madeira, Portugal.

He is a soccer player who plays a forward role in the game, who represents his nation and he is one of the greatest players ever in the history of Football with the most number of Achievements, the most number of goals by a player in a year and his lifetime and even he is the most paid and fittest athlete in the world and he also holds the most number of followers in overall social media.

Due to his commitment towards his game even at the age of 37 Ronaldo is used to play like a BEAST in the football court.

He always used to believe in himself about his game and he is the best example for the quote NEVER GIVE UP.

In his whole 18 years, carrier of football Ronaldo had won many awards and achievements but the people know him for his kind heart in which he didn't have any kind of tattoo on his body to donate blood at regular intervals and he used to sell one of his four Ballon d'Or at an auction for 4.6 crores to raise fund for charity.

*-B.Radha Sai, (III/IV, B.Tech.)*



## EGO

The ego generated from the mind which is trigunathmakum (sath, rajas, thamas) (comprised of 3 characters). It's a big, barren tree with its foundation zero and exists only when the intellect (swan) is killed. Then the fruits (results) of the EGO are kama, krodha, lobha, moha, mada, mathsarya. The man with that EGO centric nature is nothing but rakshasa (devil).



-By Hari Nageswara Rao  
(VHP member)

-Recreated by Vaishnavi. G  
III/IV B.Tech

## Handling Self Love

F.L.Y[First Love Yourself], “Your greatest responsibility is to Love yourself and to know you are enough”. It’s been well said by Maya Angelou- “The real difficulty is to overcome how you think about yourself”. Accepting ourselves is a very difficult task to be done.

There are a lot of people out there who think about self-love as being selfish but self-love is not being selfish, you truly cannot love another until you know how to love yourself”.

Selflove is quite simply the regard for one’s well-being and happiness. What does loving anybody involve? Well, it requires regard for their well-being and happiness. We love someone because we believe they’re worthy, important, and special.

A little reminder – Talk to yourself the way you’d talk to someone you love. Be warm and understanding towards yourself when you suffer, fail, or feel not good enough rather than punishing yourself with self-criticism. Give yourself a break, don’t be hard on yourself. You’re human and a lot of people relate.

Is self-love necessary for teenagers?

Teenage is a very important phase in a person’s life. It is then they start understanding what life actually is and conditionally they start planning about their future, thereby, loving ourselves would prove an important part in the framing of our bright future.

How can one practice self-love?

1. Patting up yourself first.
2. Prioritise ‘your’ time.
3. Stop self-criticizing.
4. Catch more ZZZs (quality sleep is most necessary)
5. Always keep yourself in the “feel-good” zone.



-Vajritha, (III/IV, B.Tech)

# A FOREIGN DREAM



BVNSG SUDARSHAN  
(IV/IV B.Tech)

There are lots of uncertainties when I thought of an abroad education. My family was more fascinated than me for the study abroad, their excitement made me give a thought to studying abroad. Different consultancies speak several things about the entrance exams, scholarships, cost of living, and choice of country. All these things made me tangled, then after self-research, I concluded to study in Canada. I am fond of biochemistry and I wanted to pursue my master's in that field. The gap arose due to covid helped me in enhancing my knowledge regarding different education systems around the world. Then I made my decision to start my master's in 2023. I need to complete my ILETS which is an English proficiency exam, I thought I had much time to prepare for the exam but on a funny note, I cracked it in five days with a decent score. I am still waiting to receive the offer letters from the universities to which I had applied.

The moral that I have learned is, to apply ASAP! to the universities immediately after completing your IELTS exam.

Since I was a child, I have always been fascinated with science and technology. I am very interested in having the opportunity to continue my study. Particularly chemical engineering mesmerizes me seeing that it solves different real-world challenges. My learnings while working on projects and presenting the results to industry personnel and their feedback, helped me develop good research skills and a better understanding theory, all while improving my confidence and public speaking. The University Masters program in Chemical Engineering is internationally recognized and competitive. Recognized among top 50 Chemical Engineering Programs by German News & World report. So, my masters at esteemed Technical university in Germany preferably suits for my goals and aspirations. My decision to study masters is result of my wish to contribute to the betterment of society. There is a great demand for chemical engineers who has good exploration skills. I look forward with the people with the hope for a pleasing decision.



V Chetana Reddy  
(IV/IV B.Tech)

# INTERVIEW DAZE



At the very first I was a kid who doesn't even know what to do in his life, but at the end of 7 semester, I was put into the zone of campus placements. At the beginning itself, I faced a setback because I couldn't clear the campus tests conducted by two named companies. I went into a dilemma wherein I felt, I wasn't meant for the field of software and up then I barely understood any concepts of QA & VA.

A couple of months later TCS hiring started, at first, I had a feeling that I should surely crack this exam but the failure of the past hirings pulled down my confidence. Nonetheless, I applied for it and prepared for the exam well. After the exam, I only had one thing in my mind, Were my answers correct? Can I clear it?

After a few weeks, I got the mail that, I have cleared the examination and should be ready for an interview in a few days. I was elated with joy for clearing the exam but a new fear got built up in me which is Can I face the interview?

I was lucky enough that the department has conducted a mock interview beforehand which boosted my confidence. I put on my happy face for the interview and confidently answered the interview panel. I mumbled at a few, I wasn't able to answer a few but I didn't let my confidence go down this time.

After the interview again questions were raised in my mind Were my answers convincing to them? Can I clear the interview round?

A few days later, to be clear on the 16th of October at 11:51 pm I got a mail stating "Congratulations! We are delighted to inform you that you have successfully completed our initial selection process. We are pleased to share the TCS Offer Letter with you." At that moment of time, I became totally numb, Is this mail real? Am I really selected? - Yes kid you are!

Early in the morning, I started calling everyone near and dear to share my heartfelt happiness with them. A really good experience for me overall. Well, the message which I would like to convey is just don't lose your confidence by the setbacks you face but rather Chin up! and face every situation with complete confidence cause "Confidence is the key to success".

-IVRKNS Aniketh  
(IV/IV B.Tech)

# INTERVIEW DAZE

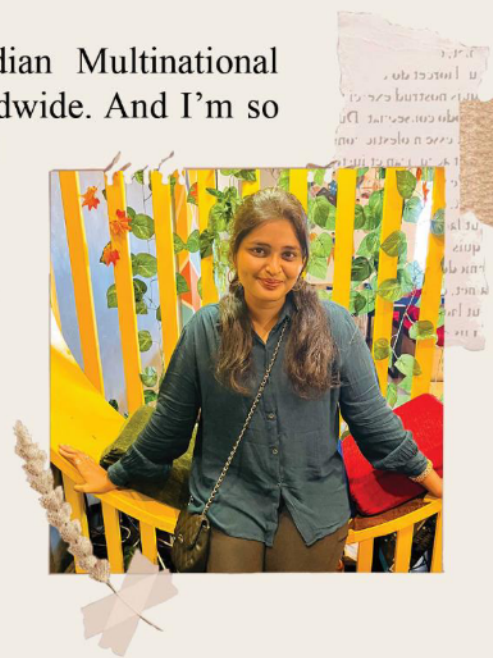
Tata Consultancy services (TCS) being the largest Indian Multinational company, it has the most valuable IT services brands worldwide. And I'm so overwhelmed with happiness to say that I have been selected for TCS Digital.

A little bit of relevant background information, I am a chemical engineering student (not computer science or information technology) and I consider myself a decent one.

A few months ago, to be precise on the 22 nd of October,2021, I found myself in front of my laptop at my home, dressed in the nicest and decent clothes I own, shaking so hard that it scared the living daylight out of me. My anxiety reached the point of exacerbation during the fifteen minutes that I spent waiting for the interviewer. In the blink of an eye, there were two men present on my screen and my conversation with them lasted for 45 minutes.

After fighting my irritation and regaining my composure, I continued and my confidence increased little by little for every question they asked. I was not able to answer properly for a few questions but I didn't take a step back instead I tried to talk about my positives. Without hesitation I asked the interviewer about the company and I got to know more about the company and its working atmosphere and I ended up saying "I'm very excited about becoming an asset to you and your team!" and to my surprise they were impressed and they said " We'll be looking forward to work with you".

And that's how it ended. After a few days, I received a mail stating I have been selected for TCS Digital. I was engulfed with happiness and all my hard work paid off. I always believe people glow differently when their confidence is fueled by belief in themselves. And my first experience of interview was really an inspiration for me.



-S Sravani  
(IV/IV B.Tech)

# Alumni Byte



Aditi Kumari  
(2017-2021)

Looking back at the four years that I spent in engineering, there are so many memories that come as my flashback. From enthusiastically participating in Tech Fests to submitting assignments on time each day has been a memorable one. I had the pleasure of completing my graduation under the guidance of highly efficient professors and management. The best part of our department is the friendly faculties who are always ready to guide you, encourage you to do the best. Engineering course is not just a process of earning a bachelor's degree but rather it is a period that defines your life. You enter a college as a confused teenager but the right institute and faculty members will serve the very purpose of moulding you up in each and every aspect. Today where I am standing in the career path is the second level and it is too

strong and bold but it is just because the first level roots are in a best way possible. I have spent the best four years with wonderful people around me.

July 27th, 2017, the day I stepped foot in the Chemical engineering department is a major turning point in my life. Riding on the back of mediocre results in Class 12 and other competitive exams I had apprehension about whether I would do well or not. But to my pleasant surprise, I was able to tackle all the hurdles and successfully complete my graduation with flying colors. I had three offer letters from reputed companies like TCS, Deccan Fine Chemicals, and Hetro Drugs before relieving from the college. It was only possible because of the constant support and guidance of all the faculty. I feel blessed to have these wonderful teachers who are willing to lend their blood and sweat for the progress of their students. The important attribute which ANITS instilled in me by the end of my graduation is the 'Confidence' to achieve anything in life.



P. Abhishek  
(2017-2021)

"Knowledge is immense". To achieve success in a life we should need knowledge. In order to gain knowledge, hard work should be done. We have done hard work and smart work to achieve knowledge with the help of professors. I have praises along with sweet punishments. Many times up's and down's are came but my teachers and friends are helped me to overcome the struggles.



D.Sumanth Raj  
(2017-2021)

Finally I have achieved a B.tech degree with a good score. I'll be thankful to all my professors. I would remember all these sweet college days throughout my life. Now I proudly says that I'm an chemical engineer from Anits. Thanking You

# Alumni Byte

Joining Anits has not only laid the foundation for my academics but has showed me the way to live the life. I got the opportunity here to enhance my extra curricular skills also which is a mandate for every student for a positive growth.

After college few may choose to study, few may choose to do job, but whatever u choose with 'your whole heart is what makes ur life worthy. You may find a new avatar of urself filled with full of life values only when you try to put yourself in a best position which also fulfills your happiness. College life is always full of memories whether it is good or bad. You discover all your avatars as life goes on

"SELF-BELIEF AND HARDWORK WILL ALWAYS EARN YOU SUCCESS"



Yaswanth  
(2017-2021)



Dante Ronald  
(2017-2021)

My college days was not only about academics. I would like to represent my college days as a cake because I am a foodie. It was like a triple layered strawberry cake. The first layer was that I managed to overcome my stage fear. This happened on the freshers day when I was called upon stage for the first time. The second layer was my transformation from being an introvert to extrovert. It was in this college I started to socialize myself. Back then I used to feel shy to talk to women so I started interacting with peers both male and female. The third and final layer is that I was made a better human. College taught me not only studies but habits, manners, interaction and many other aspects of life. Of course, as an icing on the cake

the academics were really good and as a little cherry on top, I managed to secure good grades and a job.

Hi everyone! I'm Reshma. I belong to the batch 2017-2021. I'm excited to share this small journey of mine and what it led me to..

Opportunities aren't given, they're taken. Honestly 4 years in ANITS to me feels like a blessing because I took the opportunities whenever possible. Be it fest, annual day or seminar by a chief guest, always show your interest in organising it or to be a part of it. Experiences like these, help you understand what it is like to lead a team and also help you bag few memories that'd be most important to you as you grow up!

No matter how hard you work and how good your grades are, always have a good bond with lecturers. They do not only have lessons to teach but experiences to preach. Listen to them and what they've been through. It really helps you achieve your goals easier and faster.



Reshma Kalla  
(2017-2021)



## How am I even in 3rd Year?

It all began in march 2020, My 1st semester of 1st year was completed, and I was slowly habituating for college life, and we had celebrated our fest in February, that was a blast and enjoyed a lot. Everybody was little aware and talking about the situation occurring across the globe with regards to corona virus pandemic, and none of us took it so seriously and we are in our boomerang of college life...

But suddenly like a bolt from a blue, we heard emergency of the situation across India..Government was asking everyone to wear masks and isolate themselves and I don't even saw mask until then., and it was all new. People began to super worry. And finally Government announced whole India LOCKDOWN....

What we all thought was college is going to be closed for some couple of days.. So, we can enjoy the uninvited vacation...But the situation went worse..15 days extended to 1 month, and 1 month extended to 2, 3....and in between the worse and worsen condition of the covid across the world...and habituated to mayhem and madness followed...

There was a new term which was trending then, which was ONLINE CLASSES... none of us were familiar with that term...I was just thinking again and again that "How come Online class was even possible?" ...In August 2020,Our college announced that there will be commencement of class work through online mode! We all were super excited to experience this new thing..we all were requested to install the respective online teaching platform apps.

Slowly we were adapting to the online classes. Mic on,Mic off,Screen share,Video on,Video off,these were the only things I keep on listening everywhere...everything turned out fade,Classroom became Google classroom,Notes became PDF,chitchats were in Whatsapp chats,Hanging out in Calls,Talking face to face in video calls,Movies in OTTs..even at last exams were even conducted through online mode which was not very disappointing LOL..and I wondered that my 1st year was completed but the pandemic trauma wasn't. Same way 2nd year was going on and Finally began to hear the drop of cases count..and slowly everything was opening..and our college was opened and yes finally we met our friends and slowly the things were coming back to normal.But, that wasn't lasted more than a month the pandemic bounced back again with more strength with 2nd wave.

Our 2nd year was completely drowned in online mode with the 2nd wave.No knowledge was gained as online platform was not effective and Even no college days fun..No hanging in canteen..No bunking the classes..No interaction with teachers and friends..No celebrating fests..No feel as a college student...and finally 2nd wave slowly fallen down and colleges were reopened again...and I wondered when I saw my juniors that "When the hell on the earth I became senior?".I didn't even realized until one of my friend came and said "Bro! We are in 3rd year now!".I still sometimes thinks that I was a 1st year student..and always questions myself "HOW AM I EVEN IN 3rd YEAR?"

*-Ch.V. Durga Prasad, (III/IV, B.Tech.)-*

# NIGERIA EXPLOSION

An oil refinery is a place where people make petrol and oil from crude oil. Unemployment in Nigeria grew a lot in the past 10 years. Many illegal oil refineries are in Nigeria. many people work at these refineries. Workers steal crude oil from official pipes. They clean it in the bush, and then sell on black market. They camp at the refineries for many weeks, and they often work at night.

This causes explodes and this hazardous process has led to many fatal accidents and has polluted a region already blighted by oil spills in farmland. Also many bodies were left scattered among burnt palms, cars and vans on Friday explosion which killed more than 100 people at an illegal oil refining depot. Dozens of workers were caught up in the explosion while many others attempted to escape the blaze by running into wooded areas.

Although Nigeria is Africa's largest producer of crude oil, for many years its oil production capacity has been limited by a chronic challenge of oil storage and the operation of illegal refineries. Nigeria lost at least \$3 billion worth of crude oil to theft between January 2021 and February 2022, with shady business operators often avoiding regulators by setting up refineries in remote areas such as the one that exploded in Imo, the Nigerian Upstream Petroleum Regulatory Commission (NUPRC) said in March.

"There are no arrests yet but the two culprits are on the run with the police now looking for them," said Declan Emelumba, the Imo State commissioner for information. Officials did not reveal the identities of the suspects. A mass burial is being planned for those killed in the explosion, many of who "were burnt beyond recognition," said Emelumba. Environmental officials have started to fumigate the area.

Such disasters are a regular occurrence in Africa's most populous country, where poverty and unemployment – at 33% according to the latest government estimates – have forced millions of young people into criminal activities.

The practice is so widespread that is affecting Nigeria's crude oil production, in the oil-rich Niger Delta region. Nigeria is Africa's largest producer of crude oil but it has very refineries and as a result most gasoline and other fuels are imported.

*-N.Harika, (II/IV, B.Tech.)*



# NOTEBOOK TO CANVAS



M.Sai Roshitha III/IV



M.Sai Roshitha III/IV



S.Srivalli II/IV

ఆనందం అంటే ఎంటో తెలీదు  
నిన్ను చూసేంతవరకు...

సంతోషం అంటే ఎంటో తెలీదు  
నువ్వు నవ్వేంత వరకు...

భాద అంటే ఎంటో తెలీదు  
నువ్వు ఏడ్చేంతవరకు...

భయం అంటే ఎంటో తెలీదు  
నువ్వు కోప్పడేంతవరకు...

ఆప్యాయత అంటే ఎంటో తెలీదు  
నువ్వు ఆదరించేంతవరకు...



ప్రేమ అంటే ఎంటో తెలీదు  
నువ్వు లాలించేంత వరకు...

ధైర్యం అంటే ఎంటో తెలీదు  
నువ్వు భరోసా ఇచ్చేంత వరకు..

నీ గురించి ఎంత రాయాలో తెలీదు...  
కాని ఎంత రాసినా తక్కువే  
అని మాత్రం తెలుసు...

-Mahesh (III/IV ,B.Tech)



# शायरी

जो तलानो पर चौकीदारी करते है ,  
वो समन्दरो पर राज नहीं कर सकते !

बहोत थक गया था परवाह करते करते,  
जब से लापरवाह हुवा हूँ, आराम सा है !

समंदर ना सही पर एक नदी तो होना चाहिए,  
तेरे शहर मे ज़िदिगी कही तो होनी चाहिए !

चुम लो हेर मुश्कलि खो अपना मान कर,  
क्योक ज़िदिगी कैसे भी है ... है थो अपनी ही !

अक्शर अपनो की खुशी के चलते,  
लोग खुशियों की खुद खुशी कर देते है !

-Muskan (III/IV ,B.Tech)

**STERLING & WILSON**

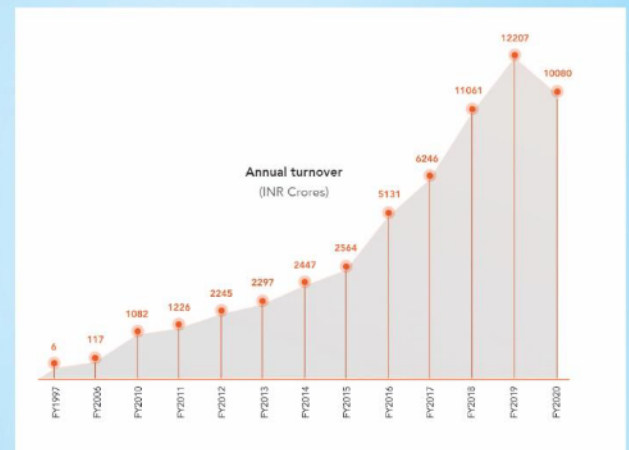
## A legacy born out of friendship

A business partnership born out of friendship and mutual respect in the 1920s between Shapoorji Mistry Sr. and Mehervan Daruvala, the latter's company Wilson Electric Works served as an electrical contractor for Shapoorji Pallonji Construction, working on some of India's biggest commercial and residential projects. As the relationship blossomed, Wilson Electric Works joined forces with Sterling Investments of the SP Group in the year 1973, to form the engineering behemoth that is Sterling and Wilson.

And we've never looked back...

**Our growth follows the power law.  
How fitting.**

From being electrical contractors in the 80s to being the subcontinent's largest MEP and EPC business today, Sterling and Wilson has come a long way. It has grown in leaps and bounds, from a turnover of ₹2,245 Cr in 2012 to ₹10,080 Cr in 2020.



## M.E.P. - Electro Mechanical Services

S&W's MEP services division Established in 2012, and today is one of the fastest growing Engineering Facility Management Companies in India. The division comprises 100+ management staff and 5000+ in-house field engineers, technicians, and operators currently servicing over 2,20,000 TR of HVAC systems and HT/LT electrical systems around the country.

We cater to a wide range of sectors such as Government and PSU, Commercial and Corporate, IT/ITeS, Hospitality and Healthcare, Pharma, Residential, Power, Railways and many

## Our Offerings

Operation & Maintenance (O&M) contracts for MEP installations such as HVAC, Electrical, FireFighting, Fire alarm & Public address, IBMS, medical gas plants, and air compressors

360° solutions with Annual Maintenance Contracts for HVAC, Electrical, FireFighting, Fire alarm & Public address, IBMS.

**for Service Support:**

for O&M:  
Mr.Manideep/Mr.Ramesh  
9490895343, 8121472493

for AMC:  
Mr.Suman  
8008669143

Regional Head South:  
Mr.E.V.R. Murthy  
9100033911

# WHY RASAGYAN WAS BORN?

A small idea to spread knowledge and wisdom along with bringing out the inner talents of the students gave birth to RASAGYAN. It is the first ever departmental magazine in the history of ANITS.

Our Motive for a Better World , Our Motive for a Prosperous Society , Our Motive for a New Generation which seeks :

1. To Enshrine The Hidden and Extract the Existing Creativity among the Energetic Minds.
2. To Enrich Analytical, Thinking, and Writing Proficiencies.
3. To find Research Oriented Minds, For a Better World.
4. To bring Awareness about what's going on in and around our campus.

There are no restrictions for writing articles. It is not necessary that the articles should be related to any particular field. We accept vibrant range of themes. Articles related to our department and current affairs are given more preference. We do not limit ourselves. We accept poems, paintings, art and photography from the students.



## Reach us Out

We would like to know more about what our readers think for where we should land and where we should meet in our magazine. Please feel free to chip in your ideas, queries, complaints, compliments, suggestions and words that help us to get as a feedback to this edition of magazine. Help us to improve, help us to stand for our improvement. Write to us at the mentioned mail address and please support us. Thank you for sparing your time with us!

Send your own articles, photographs, poetry, cartoons, short stories, humorous content, drawing and painting or anything else that you would like, that could be portrayed through us in this magazine to the mentioned mail address or submit it to any of the editorial team members.

EMAIL: [editor.rasagyān@gmail.com](mailto:editor.rasagyān@gmail.com)

# CHEMFLARE-2022

# SPONSORS

STERLING & WILSON



YOUR HONEST STUDY VISA PARTNER



**Unixperts**





**Dr. M. Shiva Naresh**  
The Teacher who paved the way...