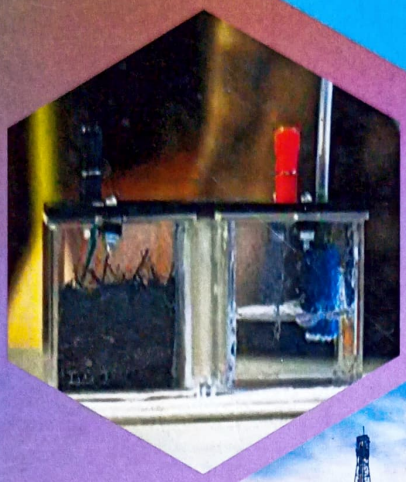
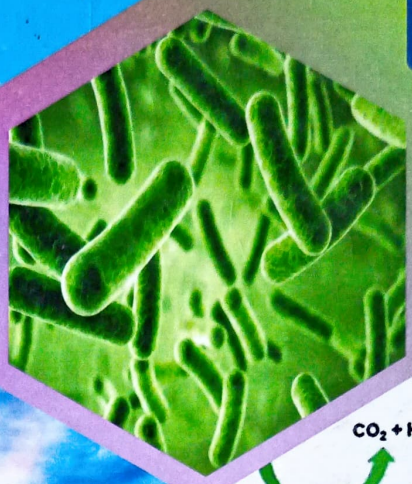
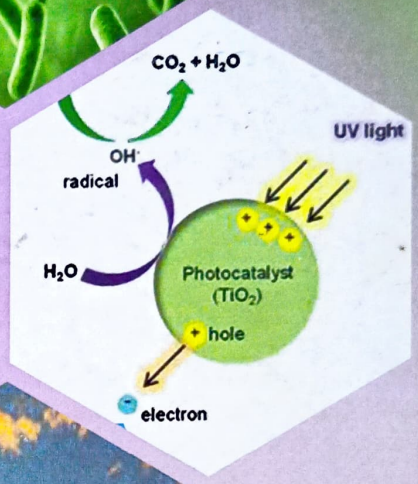
FRAGYANAM BRAHMA

ANITS

VOLUME-III







rasagyan

Wings of CHEM Knowledge

CONSTITUENTS

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editors note

As the proverb goes "A journey of thousand miles begins with a single step". The publication of this maiden magazine is a major milestone in the progress of our department. This magazine will open a window of opportunity to all the people who want their voices to be heard. We are striving forward with the hope of creating a future full of optimism and enthusiasm.

To the readers:-

Faculty, parents and my co students a little patience will help us see through and come out even stronger in the future. Most importantly it ignites pleasure, satisfaction and a great sense of pride in me for being the Editor of this magazine. We would like to end this note by giving heartfelt thanks to our seniors who gave us a great opportunity for presenting ourselves.

Hope you all enjoy your reading...!!!

V.V .Sai Karthik (III/IV)
— Editor-in-Chief

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- Abdul Quddus (III/IV)
- K.S.S.N.V.Vara Lakshmi (III/IV)
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FACULTY ADVISOR

B.Pradeep santosh kumar
Assistant professor

Profile of Department of Chemical Engineering, ANITS

The Department of Chemical Engineering was started in the year 2012 with a UG programme in Chemical Engineering (60 intake) and a PG programme in Biotechnology (8 intake). The Department boasts of a very efficient team of faculty with 5 Ph.D.s and 7 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 has an ongoing UGC major research project worth of Rs. 12,39,100/- and a completed consultancy project worth of Rs. 30,000/-. The knowledge and skills gained is imparted to the students in class rooms by conducting workshops, seminars and conferences to craft the next generation of engineers. So far the department has conducted three workshops in that direction. The department has well equipped Chemical Engineering laboratories and various equipments for inter disciplinary research in the fields of Biotechnology and Nanotechnology. The major equipment include uv-vis spectrometry, gas chromatography, laminar air flow chamber, autoclave and Fermenter.

Modern teaching methodologies are constantly implemented to foster an improved class room environment. Team work among students is encouraged to inculcate positive work habits and passion to work wisely, creatively and effectively. Students to their credit won many prizes in curricular, co-curricular and extra-curricular activities conducted at various IITs, NITs and reputed institutes across the country. The students of Chemical Engineering formed a student body called, RACE (Rays of ANITS Chemical Engineers) to inculcate new technologies in the form of workshops and to exhibit their technical and nontechnical talents in the form of student conferences (CHEMFLARE). RACE body organized two Techfest's from its inception. RACE body to its credit also organized Charity by distributing free medicines at Araku in collaboration with Lions Club, Visakhapatnam. The students of Chemical Engineering are placed across various IT industries like Infosys, IBM, Mu Sigma, and Ux Reactor and in core industries like Ocean India, Divis laboratories, Teejay India Pvt. Ltd. and Deccan Fine Chemicals Pvt. Ltd. to name a few. Students are also encouraged to study further inline and across the Chemical Engineering.

Head of the department, Chemical engineering.

Faculty Profiles

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

Prof. G. H. Rao: Major research interests are Chemical Reaction Engineering, Optimization and Design of Bio-Chemical processes. Worked on fermentation of different by-products, optimization of bio-process parameters using Response Surface Methodology (RSM) and Artificial Neural Networks (ANN).

Prof. V. Sridevi: Major research interests are Bio-Technology, Optimization of Bio-Process. Currently working on Isolation of Novel Micro Organisms from various sources and their utilization to produce value added products.

Dr. Ch. Anil, Associate Professor: 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.

Dr. M. Shiva Naresh, Associate Professor: Major research interests are in Theoretical Biology, Experimental Design of Bioprocess and Synthesis of Nano Materials. Current working on photocatalytic degradation of pathogens and heavy metals present in contaminated drinking water using nano TiO2 catalyst. Published papers on protein- protein interaction of HIV and immune T-cells and optimization of process parameters of fermentation process. Completed consultancy project on anticorrosive paints to M/s Anantha Coatings, Hyderabad.

Dr. P. Mary Anupama, Sr Assistant Professor: Major research interests include Optimization of fermentation processes, production of enzymes, primary and secondary metabolites. Currently working on a UGC Major Research Project entitled "Optimization of production parameters, extraction and characterization of a medicinally important drug violacein by Solid state fermentation". Other research areas of interest includes studies in downstream processing and Biofuels. Editor to a number of journals of repute.

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

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

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.

Mr. B. Pradeep Santosh Kumar, Assistant Professor: Major research areas of interests includes 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.

Ms. P. Mallika Rani, Assistant Professor: Major research interests are in battery technology, fuel cell technology. Currently she is working on insitu carbon coating techniques on LFP cathode

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

Ms. B. Suchitra, Assistant Professor: Major research interests include Plant Designing and Optimization, Enhanced Oil Recovery Techniques and Revamping of Mini-Refineries. Currently working on Optimization of Distillation Columns by altering Crude Feed Composition through Aspen PLUS and HYSYS.

Ms. C. Maheswari, Assistant Professor: Major research interests are in the treatment of waste water with industrial waste and modeling, optimizing the treatment efficiency. Currently working on the removal chromium using red mud, a bauxite industry waste.

Faculty Members

RACE (RAYS OF ANITS CHEMICAL ENGINEERS)

Rays of ANITS Chemical Engineers or in short RACE, started in the year 2015 is the student association of the Department of Chemical Engineering to facilitate the curricular, co-curricular, social and extra-curricular skills of the students helping them in facing today's world. The main objective of RACE is to carefully plan and implement various activities which enhance the competitive skills of the students thereby providing them with a perfect platform to display their skills.

RACE body under the guidance of motivated and energetic faculty members of the Chemical Engineering Department has so far conducted two National Techfests under the banner of 'CHEMFLARE'. In this short span of time the RACE body has shown its mettle by establishing itself as one of the most valuable assets of ANITS family.

Curricular Activities: RACE has organized various co-curricular activities to foster student's knowledge by conducting national workshops and arranging interactive sessions with eminent personalities from various fields.

Extra Curricular Activities: RACE organizes various types of activities encouraging students to take part and overcome their various fears and help them in becoming more confident nurturing their overall development.

INTERNATIONAL TIGER's DAY: On the eve of International Tigers Day on 29th July 2017 RACE has organized interdepartmental activities like essay writing and elocution. Many students from various departments actively participated in these competitions.

Engineers Day: On 15th September 2017 Engineers Day was celebrated at Department of Chemical Engineer and a quiz competition was also organized.

Ad-Making Competition: RACE organized Ad-Making competition to bring out the creative skills of students. The idea was to make short films highlighting social evils of the society. The First Prize was bagged by: B. Ajay Chowdary, Abdul Quddus and P. Sai Dhanush of III/IV B.Tech Chemical, for their short film on 'Drink and Drive'.

Race Body Members

Motivational story: Oprah Winfrey from Rags to Riches

She was sexually abused at 9; she ran away from her home at the age of 13; She was only 14 when she found out she was pregnant; She became beauty queen at 17; She was a victim of drug abuse all through her 20s; She became the first black American women on National T.V in America and Millionaire at 32. Sounds unbelievable but it is true.

Zero to Hero: Oprah Winfrey is one of the most respected Black American women in the world. She started out a deprived black American girl in the poor city of Kosciusko, Mississippi to unmarried lovers. She started her early education in the kitchen of grandmother because her maid mother could not afford formal education. Her grandmother, Hattie Mae Lee, was so poor that Oprah often wore dresses made of potato sacks, for which the local children made fun of her.

At 14 after the death of her son shortly after his birth; Oprah was shipped off to her father Nashville Tennessee; who was strict and made education her priority. She went on to high school and became teachers' pet but that did not stop her falling into some tumultuous relationships. That introduced her back to hardship.

Determined to make her life work, she at the age of 17 entered a local beauty pageant and won Miss Black Tennessee beauty pageant; becoming the most popular girl in school. She also attracted the attention of black radio station, WVOL, which hired her to do the news part-time. She worked there during her senior year of high school, and again while in her first two years of college.

In 1983, Winfrey relocated to Chicago to host WLS-TV's low rated half hour morning talk-show, AM Chicago. The first episode aired on January 2, 1984. Within months after Winfrey took over, the show went from last place in the ratings to overtaking all talk-shows as the highest rated talk show in Chicago. It was renamed The Oprah Winfrey Show, expanded to a full hour, and broadcast nationally beginning September 8, 1986

Today 30 years later; Winfrey is was coveted with the title "arguably the world's most powerful women" by CNN and Time.com, "arguably the most influential women in the world" by the American Spectator , "one of the 100 people who most influenced the 20th century" and "one of the most influential people" of 2004,2005,2006 till by time.

So now you know it is not how highly placed your birth is but, what you decide to make of your life. If you sit down and wallow in self pity you will amount to nothing and life will move on without you.
Remember, it is not over until you say so…

-T.Hasmita (IV/IV B.Tech)

PLACES OF STUDY

Ms.B.Suchitra
Assistant professor

Schools, Colleges, Universities, Academies, Alma Maters, Multiversity's – all these words come into your mind when you are asked about places of study. But what is a place of study? Is it just a place where we can gain knowledge? No!

Home – Schooling

Knowledge can be gained anywhere. In the olden days, children were home-schooled. They were taught moral values, their family profession and survival skills. But, at home, their knowledge is adulterated by prejudices and superstitions that their adults believed and passed on to them. Also, a continuous form of schooling wasn't there, which made it impossible for the children to gain an uninterrupted insight into things they were taught.

Single Gurukuls

Then came the concept of common-schools or Gurukuls. A teacher established a small school of philosophy, and taught based on his own set of skills and thoughts. Students from different backgrounds received the same knowledge, so there was uniformity. However, the students were biased based on their caste and creed. Also, all the prejudices and beliefs of the guru that were passed on to the students. For example, Dronacharya, who taught Pandavas and Kauravas was partial to only the Ksatriya and Brahmin Clans. He dismissed and abused Karna, believing that he was from other caste. This kind of prejudice, made the students narrow-minded in a Gurukul run by a single guru and also the guru could teach at most two or three subjects or skills.

Gurukul Ashrams

After the single Gurukuls, then came a concept of Gurukul Ashrams, where a group of teachers taught students from different backgrounds and imparted different sets of skills to them. This had several advantages. There was no single prejudiced belief in the teaching. All the gurus agreed on a common belief, which broadened the perspective of their teaching. There was very little chance of narrow-mindedness and students benefitted getting to choose to learn from a number of subjects and skills that were available at the Gurukul ashram. However, there still was a disadvantage, Children were sent away from home and grew away from the bonds of family. This effected their relations and they became more detached from their families and the society itself.

Modern Places of Study

Modern Schools and Educational Institutes are perhaps the best places for a child to gain knowledge. These are the places of Study, where the Student can learn from listening, observing and developing his own philosophy of thoughts, rather than accept them from a teacher. Students are

nowadays encouraged to think freely and out of the box, enabling them to gain wider knowledge through curiosity. Students are now able to stay with their family or at least visit them more often, helping them to understand the importance of family and society more.

Knowledge isn't the only purpose of a place of study. These are also places where a student can

1. Learn discipline
2. Develop Social Skills
3. Enlarge Experience
4. Gain Exposure
5. Observe the behaviour of others
6. Learn to adjust with different people
7. Develop tolerance and brotherhood
8. Understand a common set of moral values
9. Choose what he wishes to learn
10. Develop professional interests and career

Even though, we wake up grudgingly in the morning and go to schools or colleges, we always learn something new every day. All through the curriculum, we are challenged in our exams, we have fun during celebrations, we gain confidence through participating in competitions and we gain maturity by helping and supporting each other and making friends. And all through this, we develop a better character. Above all we become a better our self

So a place of study isn't just a place to study, it is a place where we learn, grow and understand better. It is a place which makes us believe that education has less to do with knowledge and more to do with our overall development.

Optimization of production parameters, extraction and characterization of a medicinally important drug violacein by Solid state fermentation

Man is charmed by colors of nature. It not only eases our way of life, it is also vital for our survival. Black and white stand out for royalty, Greens indicate life, red for sustenance, yellow for health, and violets for creativity. Appropriate usage of these helps us to reflect our attitude and status of mind. While most of these colors are added to our diet due to many reasons, that include nutritional as well as longevity aspects. Today people add color to food with caution as it plays vital role in maintaining our health.

Health of an individual is decided by many factors which include genetic aspects, diet, work environment and exposure to pollutants. Since good old days man kept searching for medicines that can help him to overcome diseased states. The result of which is the availability of hundreds of antibiotics, thousands of drugs that can cure or help combat the simplest of the cold and head ache to cure for cancer.

In the recent scenario, the need for searching alternative to these has also increased, as the microorganisms have started gaining resistance to the existing medicines. Apart from this, the change in life style, increase in stress and few environment factors have contributed to increase in incidences of cancer. Many medicines have been synthesized and vaccines have also come up for treatment and prevention respectively. Life expectancy increased and yet death rate due to deadly diseases has remained almost same.

In this scenario, our team has kept searching for a promising drug that can be used for multiple purposes. We came across Violacein, a violet colored pigment that can be used for curing the following purposes: Anti tumor activity, Bactericidal activity, Trypanocidal activity, Antimycobacterial activity, Antimycotic activity, Antiprotozoal activity, Antioxidant activity and Anticancerous activity.

Violacein is an Indole derived pigment produced by Chromobacterium violaceum and also by Janthinobacterium lividum, Chromobacter lividum and Alternomonas luteviolacea. The variables that contribute to dye production were identified and present research is mostly focused on increasing the yield, genetic manipulation of pathway, metabolic engineering and cost reduction by searching for alternative nutritional supplements. The focus of our team is cost reduction by optimizing the variables that contribute to increase Violacein production and cost reduction. The present market cost of Violacein is Rs.30,000 per milligram.

The research in our department had started in the year 2014 in which Insilico studies were done by our student Mr. Mantriah (M.Tech Project) that has proved the broad applicability for treating various types of cancer. The UGC Major Research Project sanctioned in July, 2015 enabled our team comprising of Dr P. Mary Anupama, Prof. S.Subba Rao, Mr. D. Gurumahesh and Ms. S. Swathi to explore various areas of investigation. These include screening of nutritional variables, optimization of parameters and this was followed by reactor design for scale up studies.

Both submerged and surface cultivation methods were investigated and better yield was obtained by using later method. Hence concentration was on designing a reactor that can give us maximum surface area in the available volume space of reactor so that oxygen availability for the drug production would be high. Various designs were created using AutoCAD and finally we arrived at Tube-in-tube reactor proposed for the first time by Dr P. Mary Anupama. This is a new type of reactor fabricated with the help of glass blowers of Sri Rama Scientifics, Hyderabad, who helped in materializing our idea into a small 5L reactor. This was compared with another bubble column reactor which is also fabricated at Hyderabad by Mr. Sheik Masthan from Osmania University.

Standard nutrition supplement used for Chromobacterium violaceum, i.e., Nutrient agar and nutrient broth was used during this preliminary study. Nutrient broth was used for production in Bubble column, while the walls of the Tube-in-tube reactor were coated with Nutrient agar. The final product concentrations are- bubble column has resulted in 106mg/L while the Tube-in-tube has resulted in 264mg/L, by the end of 24 hours.

Future plan of work: The preliminary results were quite encouraging. The team is now working on trying to enhance yield using optimized medium using alternative nutrient and bring it comparable to standard medium. This would be followed by down streaming and final cost estimation for the entire process. Our Motto is to bring down the cost of dye and make it available for the common man too.

Painful treatment methods and increased rates of death, expensive methods of treatment and non-affordable of nutritional requirements- and the list can go on. All these are the reasons why there is a panic evoked as one hears the disease cancer. We strive to produce this dye- Violacein that can help us overcome cancer.

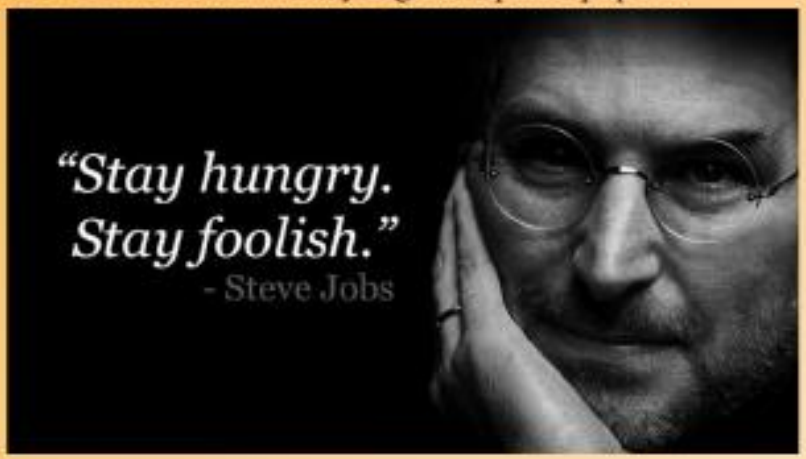
Expected outcomes of the project:

- A patent for reactor design
- Nutritional formula for Chromobacterium Violaceum that would produce Violacein, down streaming of which would contribute to decrease in cost of this Anticancerous drug.

Principal Investigator
Dr.Mary Anupama
Senior Assistant Professor

...AND APPLE WASN'T JUST A FRUIT ANYMORE

Born in 1955 to parents who would eventually put him up for adoption was a man who would bring a revolutionary change in the fields of technology and entertainment in the following decades. We are talking about none other than the man who started APPLE Mr Steve Jobs. He was born to Adulfattah Jandali and Joanne Carole. But his biological parents weren't ready for children so instead they put him up for adoption. His biological mother was adamant that his adoptive parents must be graduates who could send their child to college. But Jobs adoptive parents were not graduates and had to convince Joanne so she could finally sign adoption papers.



His father was a car mechanic and Jobs was naturally attracted to them. He especially admired the perfection with which his father would do the job, his attention to even the minute of the details. All of which helped him while designing Apple products.

His story of rags to riches was not a fairytale but one that was full of hardships and ups and down all of which helped him in achieving what others could only dream of. From a small garage to an empire his life is an inspiration to all the entrepreneurs and to each and every individual who dreams of making it big.

He proved that we need not start big to make big. Its more about all those small steps that eventually add up. He faced a lot of setbacks including being removed unceremoniously from the company he started. At the age of thirty he was out of his own company and that too very publicly. What had been the entire focus of his life was now gone. He did not weep over this instead over the next five years he started another company called NeXT and also PIXAR. Pixar went on to create world's first computer animated film – Toy Story. In a turn of events Apple eventually bought NeXT, and Jobs returned to Apple! Commenting on this in his famous Stanford commencement speech he said "It was awful tasting medicine, but I guess the patient needed it. Sometimes life hits you in the head with a brick. Don't lose faith." He said all this was possible only because he loved what he did.

And before I conclude, Steve Jobs is a perfect example of how if we pursue our dream even when we have nothing to keeps our hopes on we will succeed. It may take some time or maybe a lot of time but eventually we will.

"NO GOAL IS TOO DIFFICULT, NO DREAM IS TOO BIG, NO AIM TOO HIGH ALL WE NEED TO DO IS KEEP BELIEVING IN OURSELVES AND WE WILL FIND SUCCESS."

-V.V.Sai Karthik (III/IV, B.Tech)

A Willing Spirit, a determined Effort....

We often make many promises to ourselves everyday like getting up early, to studying every day, to make our own identity in the society and what not but how often we really put them in the practice!

In the present world where technology has developed and humans have become machines by introduction of mobile phones, computers among many other things which were a fantasy in the past. Today we see that things that were considered as impossible have become possible now. We come across many biographies of great people, they had to face many difficulties to find their path of success but they had a strong will, they never gave up even in hard times. So, if we determine anything and focus on it then nothing is impossible.

Alumina Sinhala, a national level volley ball player was thrown off a moving train by thieves for refusing to handover the gold chain she was wearing. She lost her leg when a train went over it. Around 49 trains passed over her that night. She kept screaming in pain. Early morning nearby people admitted her to a government hospital in UP where they even without a proper anesthesia they amputated her leg, while she was fully conscious. Later on a rod was inserted in the leg.

She felt helpless .People said that death was better than this disability. But she had a strong will to make her own identity, to stand on herself. She dreamt about climbing the Everest with Prosthetic legs. Everyone thought it is impossible but she proved them wrong. On 21st May 2013 she reached the Everest Summit. She became the first women in the world to climb Everest with Prosthetic legs. She proved that if we have the will to win then we would surely find our way sooner or later.

"Failure is not when we fail to achieve our goal but it is when we stop trying to win it".

-Aditi kumari [I/IV, B.Tech]

THE MASK

In this beautiful world of twists and turns, we pretend our self to be the updated version of it by putting on masks. Are you aware of it? Probably you are not!!!

People often mask the most valuable and prominent quality in them.The mask withholds other parts and claims them unworthy. There you lose the greatest potential within you. Masking one of your qualities is same as giving him/her a broken vase, asking to rebuild it by hiding two or three broken pieces!!

"There will be a lot of people who have the same calibre as you do but no one can give the spirit, the character, the creativity that you give to the work".

We weren't born with masks we put them on, so we can take them off. Start with this simple exercise:

Think about a negative message you have held onto ask yourself if it is true, more often than not the answer will be no. And if it is not then you have to ask two questions:
1. Why am I carrying that message?
2. What will happen if I put it down?

Our main fear is that we worry about society's reaction.

Don't let that stop you. Don't pull your mask partially off and let the world scare you to put it back on.

The main reasons why we should shed our masks:
1. The first is to live up to our potential.
2. The relief, the healing is something you will always cherish.

THE ULTIMATE HUMAN BEING IS ONE WHO MANAGES HIS MASKS

-D.V.S.K.Bharadwaj (III/IV, B.Tech)

GUEST LECTURES

Didactic Session on "Trends in Engineering Education"

A guest lecture cum interactive session was organized by Department of Chemical Engineering, ANITS on 20th September 2017 by Prof. M. Chidambaram, Retired Professor of Department of Chemical Engineering IIT Madras. He spoke on "Trends in Engineering Education". Motivational topics relating education and life were discussed. Points like skills and knowledge of engineering education including features of engineering education, desired characteristics of students. He told that when we stop learning we stop growing. Prof. S.Subba Rao, Head of the Department of Chemical Engineering, faculty and students of Chemical Engineering attended the session.

"Improving Energy Efficiency of Chemical Processes: Potential and Technologies"

The Department of Chemical Engineering, ANITS organized a guest lecture on 28th December 2017 by Prof. G.P.Rangaiah, adjunct Professor of Department of Chemical and Biomolecular Engineering, National University of Singapore. He spoke on "Improving Energy Efficiency of Chemical Processes". He focused on heat exchanger networks, pinch analysis, dividing wall column and process intensification. He emphasized on energy recovery, reuse and efficiency. He addressed energy saving techniques for process industries. Prof. T.V. Hanumantha RAo, Principal, ANITS, faculty and students of Chemical Engineering, attended the session.

Theological Lecture on 'INDIAN FERTILIZER SCENARIO-PROM TECHNOLOGY'

The Department of Chemical Engineering, ANITS, arranged an expert lecture on 'Indian Fertilizer Scenario – PROM Technology' by Dr. D. M. R. Sekhar, Director, CEEC International Ltd. Australia, on 30th of August, 2017. The speaker shared information of the revolutionary Phosphate Rich Organic Manure (PROM) Technology that reduces the phosphorous fixation by soil and increases the amount of available phosphate nutrient for plant intake. He also emphasized the necessity of budding chemical engineers to diversify their fields of study so that they get knowledge of how to utilize different branches of engineering and sciences for the betterment of technologies. He also interacted and inspired students to never give up on their goals and keep focusing on them. The lecture was also attended by the Head of the Department Prof. S. Subba Rao, faculty and students of the Department of Chemical Engineering.

Inner Voice

Be good, Do good, Act good
Doing so, leads to
Happy and Happening life.

Purity Matters:

You feel lighter, when pure air touches
You feel clear, when pure water touches
You feel better, when you are with nature
Leave all your worries and enjoy the fragrance of purity.

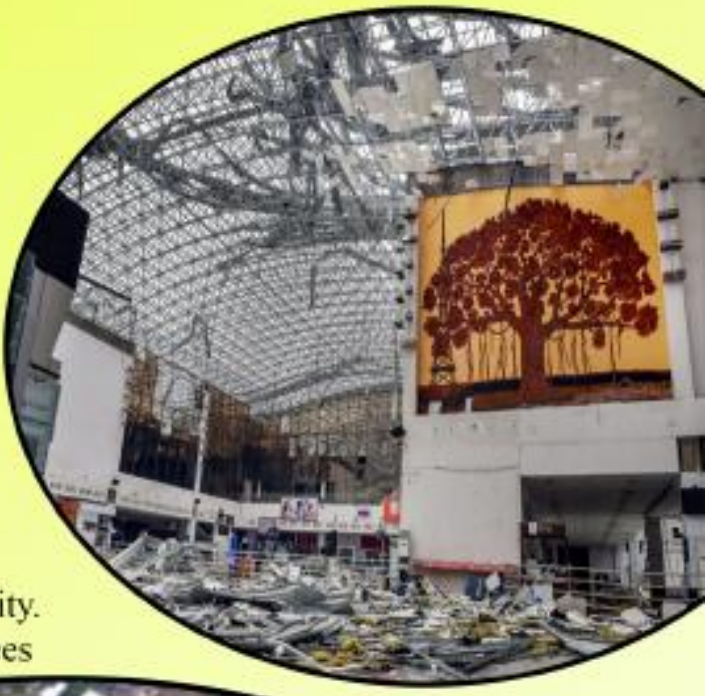
-Dr.Ch.Anil
Associate professor

Rebounce Vizag

-D.Chandini (IV/IV, B.Tech)

After ducking the devastating effects of the 2004 tsunami and the 1977 cyclone, the "City of Destiny" sadly had its date with disaster on Sunday when a very severe cyclonic storm Hudhud tore through the city, unleashing widespread destruction and bringing the otherwise bustling city of nearly 20 lakh people to a grinding halt.

The cyclone, that made landfall in the Port City around noon, sent hoardings and tin roofs flying like saucers, shattered windows leaving the streets littered with glass shreds, toppled over statues of leaders in many places as well as landmarks like the replica of the navy airplane on RK Beach. Scores of electricity and telephone poles were knocked down and thousands of trees uprooted as strong gales accompanied by heavy rainfall lashed the city right from Sunday morning to evening.



With winds raging at speeds of around 180-195kmph during landfall, waves as high as two to three meters lashed along the Beach Road. In fact, the destruction caused by Hudhud was that even chief minister did not dare to enter the Port City and had to it cool his heels at Gannavaram awaiting the clearance of r oadblocks like uprooted trees and collapsed walls on NH-16 to proceed to Vizag.

The destruction started hours before the landfall forcing denizens of the vizag to remain indoors. Many of them could not come out for hours. Vizag being a low-lying area flooding was a distinct possibility. "It is impossible to negotiate the city with uprooted trees and telephone cables blocking ways. It is very scary," said K S Narayana, a builder.

A year after Hudhud, Vizag moves on...

The port city wakes up to a new dawn on Monday marking one year of very severe cyclonic storm Hudhud crossing the city coast leaving a trail of devastation in its wake.
The devastation caused by Hudhud encompassed large swathes of land including the city and its neighboring mandals, including the coastal mandals of Vizianagaram. The city too bore the brunt of the catastrophe, as the storm blew away farms, standing crops, and structures in the district including habitations in Araku mandal.

Residents of the city, especially from the economically weaker sections waited for enumeration and verification of losses and there are still hundreds of them waiting for the promised compensation of a paltry Rs. 5,000. The victims in rural areas do not picture in the relief program and are yet to receive any aid.

ActionAid and its partners namely, Grama Swarajya Samithi (GSS), District Fishermen's Youth Welfare Association (DFYWA), Fishermen's Youth Welfare Association (FYWA), and Mahila Action, were quick to respond to the victims of the cyclone in the highly affected areas o f Visakhapatnam district.

In the span of 2 months, they could reach out to more than 5000 people in 24 villages and 11 slums. The affected were supported with immediate relief assistance such as cooked food, dry ration, clothing, education kits, first aid and livelihood support.

Even industries are unhappy as many of their claims have been disallowed. Public sector undertakings, which did not insure their properties, have been forced to accept the losses.

Many of the industrial establishments continue to sport the damage wrought a year ago.

The city was stripped off its green cover with lakhs of trees uprooted by the storm winds, now presents a new look with the green cover gradually returning. The Chief Minister has called upon the citizens to mark the anniversary as a rededication day to celebrate the resilience of the people of the city.

JUST PLANNING...

Many of the graduates have no clarification in what to do after graduation either to go for a job or for higher studies. If the candidate is willing to go for a job, there is no hindrance in stopping him. There comes the actual query, what if going for higher studies? GATE, CAT, MAT, CMAT, XAT, IIFT, GMAT, GRE, JAM, CEED all of these exams act as doorways to India's finest business schools, universities and colleges.

Gratitude and Aptitude Test in Engineering is a national level entrance exam which is one the various paths to choose from after engineering or any of the bachelor's degree into India's finest universities and also to recruit into PSU'S. It deals with many engineering branches and other sciences. GATE is exaltedly organized by one of the seven IIT's each year.

GATE code for Chemical Engineering is "CH". The paper comprises of engineering mathematics, aptitude and rest core engineering. Engineering mathematics and aptitude hold 15% each and core engineering constitutes the remaining 70%. It has a total of 65 questions with are of two types.

1. MCQ(Multiple Choice Question)
2. NAT(Numerical Answer Type)

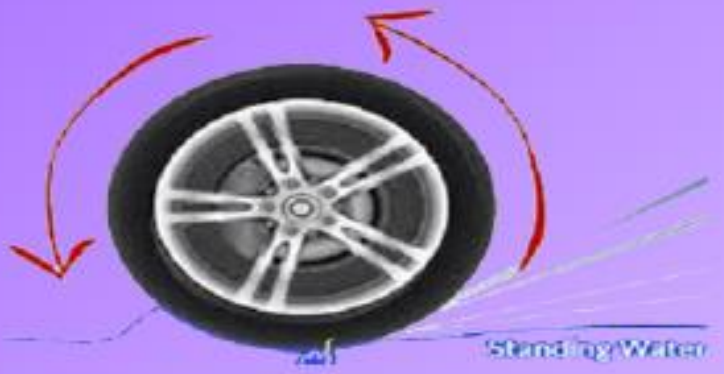
Out of those questions some carries one mark and some carries two marks. Only MCQs have negative marking, For each wrong answer 1/3rd of the total marks will be deducted.

Properly managing time and referring to important books for preparation are essential. Above all these assessments is self evaluation, and climbing up the difficulty level. Going through old GATE papers which are available online and also accessing useful videos available in NPTEL. Although many of the reputed organizations teach GATE only a handful of these are available for Chemical Engineering students.

Having a "Clear plan of action", "Determination" and "Dedication" are the formulae to succeed in GATE.

-S.V.A.S.KRISHNA KUMAR (III/IV, B.Tech)

CAN YOU RIDE ON WATER?



Have you ever thought of riding on water...?

Not with a boat but with your own bike.

Sounds cool and interesting right....!!!!!!

You can actually ride on water without sinking into it. This may sound insane or like something out of a Hollywood film but it actually is possible. The concept behind this is called as "HYDRO-PLANING" or "AQUA PLANING". The only thing that makes it possible is speed.

This is the word which sounds so knowingly unknown to us, right? Not actually. We know about it but don't know about its true potential. All that you need is to maintain a guaranteed, great and constant speed so that the wheel of your vehicle rotates fast, which makes the water to move away from your way and simultaneously lifts the wheel upward onto the surface.

Yes it's true and it is also mentioned that you need to be an experienced rider and a gutsy swimmer, but don't ever go over huge water beds because maintaining a constant speed is typical. After taking a look at this if you want to give it a try then don't forget to insure yourself and your bike first!

-G.Hemanth (II/IV, B.Tech)

DID YOU KNOW...

#THE AVERAGE SHOT OF ESPRESSO CONTAINS LESS CAFFEINE THAN A TYPICAL CUP OF COFFEE.

#FISH SCALES ARE A COMMON LIPSTICK INGREDIENT.

#LOBSTER BLOOD IS COLORLESS UNTIL IT IS EXPOSED TO AIR. THEN THE BLOOD APPEARS BLUE.

#LEMONS CONTAIN MORE SUGAR THAN STRAWBERRIES, FOR THE SAME MASS.

National Workshop on "Application of Theory to Process Industry For Engineers"

The Department of Chemical Engineering, ANITS in association with Process Engineers Group from Hyderabad is organized a two day National Workshop on, "Application of theory to Process Industry for Engineers", during the 8th , 9th, Dec., 2017. The inaugural program was graced by Chief guest Dr. G.Madhu Kumar, Honorary Secretary and Correspondent of Dr. Lankapalli Bullayya Colleges, Visakhapatnam. The other dignitaries who graced the occasion include, Mr. G.Vijay Kumar, Head, Process Engineers Group, Hyderabad, Sri Neerukonda Naveen, Treasurer, ANES, along with principal of ANITS, Prof. T.Hanumantha Rao, and Head of the Department of Chemical Engineering, Prof. S.Subba Rao and the Convener of the workshop, Mr. M.Koteswara Rao.

Dr. G.Madhu Kumar, the Chief Guest of the function insisted upon flexibility to meet the diversified needs of both industry and community for which chemical engineers need to be flexible for horizontal diversification and vertical expansion. He appreciated the organizers for incorporating hazard analysis and management which is the need of day.

Mr. G.Vijay Kumar, the Guest of Honor from Process Engineers Group, narrated his experiences during the initial stages of his job. A firm grip on ten equipment of chemical engineering is sufficient to understand and also develop flow sheets that can meet industry needs.
The program concluded with signing of MoU between the Dept. of Chemical Engineering, ANITS and Process Engineers Group, Hyderabad.

Workshop on "Environmental Challenges and Strategies"

The Department of Chemical Engineering ANITS organized a two day National Workshop on "Environmental Challenges and Strategies" during 9-10th December, 2016,. The workshop aims at discussing the challenges and strategies in pollution control in chemical and allied industries to mitigate the pollution and strive for a clean environment. The main topics focused in the workshop are fluoride reduction in water, effluent treatment in industries, reduction of particulate matter etc. which were addressed by renowned scientists, experts from the pollution control boards, industrial experts and also by the researchers.

Participants and Sponsors

There were 117 participants participated in this workshop which comprised of faculty and students from various engineering and polytechnic colleges. The workshop was conducted with the financial support of ANITS management and from M/s. Srujith Chemicals, Hyderabad, M/s Hygro Chemicals, Hyderabad, M/s Divis Laboratories, Visakhapatnam, M/s Sreekara Organics, Hyderabad.

Day 1:

The event was presided by Prof. T.V Hanumantha Rao who commenced the workshop by highlighting the effect of pollution on the world life due to the ever increasing population. Prof. S. Subba Rao, HOD, Department of Chemical Engineering, ANITS, cited how the chemical engineering is an important part of everyday life. Dr. M. Shiva Naresh, Convener, of the workshop emphasized the need for such workshops for increasing knowledge and awareness on environmental challenges.
The proceedings were taken over by Chief Guest Mr. Subhash Nandhanwar(Chief Manager Technical, HPCL), Guest Of Honor, Dr. K.Kesava Rao(Prof. Department of Chemical Engineering IISc, Bangalore), Dr. Kishore Chenna(Assistant G.M Vizag Steels) who spoke about water and soil pollution and pollution by industries majorly emphasizing on the presence of excess fluoride in drinking water. They also pointed out strategies to overcome them. Later Dr. K. V. Ramesh delivered a talk about the chronic kidney disease in Uddanam region of Srikakulam District (AP).

Day 2:

The second day of the workshop started with lecture by S. Ramappa, Asst. Environmental Engineer, TSPCB. He addressed various types of pollutions and the methods adopted to control them by industries. Later Mr. K.L.N. Phanindranath (KGD6 Oil and Gas Project, RIL Kakinada) spoke about environmental challenges and strategies in industries. Finally Dr. M. Shiva Naresh (convener of the workshop) demonstrated about "Photo Catalytic Degradation of E.Coli using TiO_2 as catalyst".

Concluding remarks were given by Dr. S. Ramakrishna Rao, in the valedictory stating that we need to converse our environment.

Workshop on "Application of Computational Techiniqués in chemical and Bio Chemical Engineering"

The Department of Chemical Engineering & Biotechnology, ANITS has organized a two day National Workshop on "Application of Computational techniques in Chemical & Biochemical Engineering" on 24th & 25th February. 'Hands on experience' on the computational techniques using different modeling software's was provided by Mr. Siva Kiran, Assistant Professor, Department of Chemical Engineering, MS Ramaiah Institute of Technology, Bangalore. About 70 participants who include faculty, Research scholars and students from various colleges attended the workshop. Speaking on the inaugural function, the Chief Guest Dr.V.Umamaheshwar Rao, Registrar, Andhra University, Visakhapatnam said that students must commit towards the academics and utilize the expertise of various professors in the department to sharpen their knowledge. He also suggested for starting up the Techno-Entrepreneur Cell in the college which would be beneficial for both technocrats and entrepreneurs. He also said that students should focus on developing soft skills and should have strong fundamental knowledge to excel in the fields of their interest. Speaking on the valedictory function, Chief Guest Prof. Ch. V. Ramachandra Murthy, Principal, AU College of Engineering (A), Andhra University, Visakhapatnam, said that students must develop a passion to learn about the emerging fields of Chemical Engineering. Shri Thapovardhan, Secretary & Correspondent, ANITS, Prof. V.S.R.K.Prasad, Principal, Prof. R. Govardhna Rao, Director(Admin), Prof. S.Subba Rao, HOD, Department of Chemical Engineering & Biotechnology and Dr.G.Hanumantha Rao, Professor, Chemical Engineering., Prof.V.Sridevi, Dean, Chemical Engineering & Biotechnology, faculty, students and participants from various colleges were present during the function.

EVERY SUCCESS STORY IS A STORY OF A GREAT FAILURE'S.

Let me share a famous life history with you. There was a man who failed in business at the age of 21; was defeated in a legislative race at age 22; failed again in business at age 24; lost the love of his life when he was 26; had a nervous breakdown at age 27; lost a congressional race at age 34; lost a senatorial at age45; failed in an effort to become vice-president at age 47; lost a senatorial race at 49; and was elected the president of united states at age 52.

Should we call Abraham Lincoln a failure? He could have quit, hung his head in shame, and could have gone back to practising law. But to Lincoln, defeat was a detour, not a dead end.

A New York Times editorial on December 10, 1903 questioned the wisdom of the Wright Brothers who were trying to invent a machine, heavier than air that would fly. One week later, at Kitty Hawk, the Wright brothers took their famous flight.

Successful people don't do great things; they only do small things in a great ways.

ONE day a partially deaf four year old child came home with a note in his pocket from his teacher "Your Tommy is too stupid to learn, get him out of the school". His mother read the note and answered,"My Tommy is not stupid to learn, I will teach him myself". And that Tommy grew up to be the great Thomas Edison .Thomas Edison had only 3 months of formal schooling

.

Henry ford forgot to put the reverse gear in the first car he made. Do you consider these people failures? They succeeded in spite of the hurdles they faced, not in the absence of them. But to negative thinkers, it appears as though they just "got lucky".

All success stories are stories of great failures. The only difference is that every time they failed, they bounced back. This is called leaned a little forward, rather than stepping back. You learn and move forward. Ask yourself after every setback, what did i learn from this experience?
You never lose; you either win or learn and keep moving forward.

-Shorab Mallo (II/IV, B.Tech)

IF CRICKET HAS VOICE

Once Geoffrey Boycott said:
"Sachin may be a great batsman but he has never been on the Lords honour board". Then the reply was "so whose loss is it more, Sachin's or the honour board's" which was given by the man who put Indian radio and television commentating on the world map, Harsha Bhogle. He was a chemical Engineering major and a management graduate student. He beat all the odds against him and found his niche in cricket broadcasting.

YOUNG HARSHA:

Harsha Bhogle was born on 19th July 1961 in Hyderabad to Prof. A.D. Bhogle and Prof. Shalini Bhogle.He attended Hyderabad Public School, did Chemical Engineering from Osmania University, did an Advance Diploma in French and received PGDM from Indian Institute Of Management, Ahmedabad.

FROM CHEMISTRY TO CRICKET

He started his career as a commentator by doing radio commentary on Ranji trophy games. Here is a story on how he started his career as cricket commentator. I was batting at 6 or 7 one day and decided to record some commentary on my University's side openers. So I got those big cassette players that we had at the time and pressed play and record at the same time. My University side loved it and wanted me to send it to All India Radio, but they would have none of it. So my father talked to the Urdu Professor, a very nice lady by the name Zeenat Sajida at the University whose son I studied with. She said "Aise kaise bachay ki tape nahi sun rahe hain, main baat karti hoon Station Master se, humarahe padhosi hain." And so she had the Station Master Mr. J.D Baweja over for lunch one day. The man turned out to be a very jovial, larger than life character from Lahore, who loved sharing his stories of growing up there before '47. He decided to give me a run on some Ranji Trophy games.

AS A CRICKET BROADCASTER

Harsha, who commented in his first international in 1985, became a household name in the subcontinent.

In 1991–92, he became the first Indian commentator to be invited by the Australian Broadcasting Corporation during India's cricket series before the 1992 Cricket World Cup.
Since 1995, he has been presenting live cricket from all around the world for ESPN, STAR Sports. He covered the 2011–'12 series in Australia solely for ABC Radio.
Harsha has been covering all Indian Premier League (IPL) seasons since 2009.
That is why Harsha Bhogle is THE VOICE OF CRICKET.

-P. V.sai sudha(IV/IV, B.Tech)

My Journey of Teaching

-Dr.M.Shiva Naresh
Associate Professor

Good Morning Sir…..are the first words heard by a teacher when he enters into the class room which ignites a sense of pride in my heart because of the respect shown by the students. The respect shown by the students towards any teacher every day is a daily wage expected by any teacher which he/she wants to earn more than the salary given to them every month. With the abundant resources of e-learning available to students I doubt myself how should I teach my students so that I can earn my daily salary which are in turn my sleeping pills every night.

Passion towards Teaching….

I remember my teachers who taught me how to eat, how to behave, how to study, how to succeed, how to cross hurdles when I was completely depressed, but even then I have some sense of dissatisfaction on the way subject is taught in class room. I was totally confused when I heard lessons of few teachers who just reproduced the material in the text book and often found it difficult to link to the outside world. On the other hand I was exposed to teachers who taught subjects with ease and fun. I was not an intelligent student throughout my education life, but one mantra I always believed and has brought success in my education life is hard work. I used to read my lessons daily and have a look at the material before the teacher teaches in the class and listen to the classes with utmost respect towards the teachers. There were also days when I used to sleep during most of the classes. During my later part of my education life I understood reading and listening are not the ingredients of mastering the concepts but analysing the subject plays an important role in mastering the subject and linking to the outside world.

I thank all my Professors for what I am today, G. Hanumantha Rao (Professor at Andhra University), my Professors at IISc Bangalore, Professor Narendra M. Dixit (PhD advisor), Professor Jayant Modak, Professor Gandhi, Professor S. K. Gupta , who taught me to analyse things and correlate to the outside world. At the end of my education life I remember my grandmother words fill your stomach full and work hard similarly. I attained the taste of education, after I completed my PhD. That is why I recommend many students to study higher educations in good universities before earning, if there is even 1% support from their family. I thank my parents who supported me throughout my education life ignoring the tough Indian social life styles.

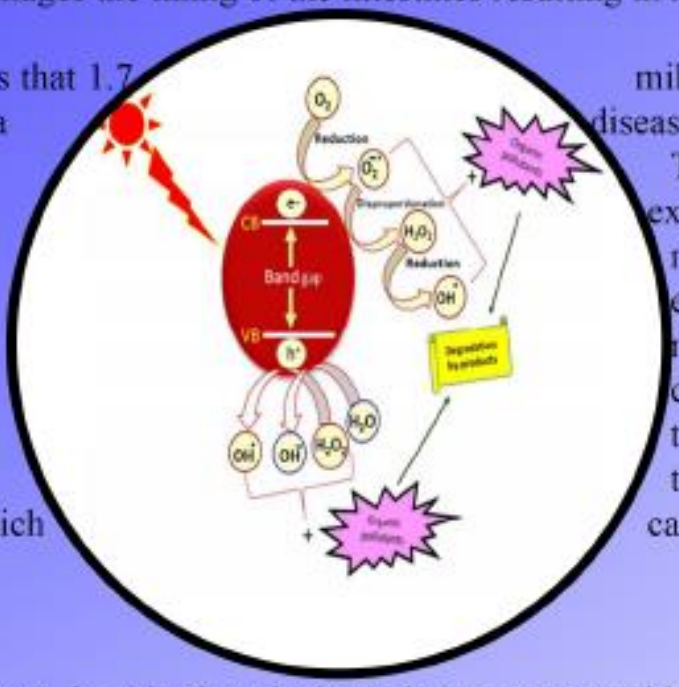
Then I thought what can I do with the knowledge base? Oh sorry for using the term knowledge base, I think it would be better to use the word experience as student in gaining knowledge of analysing the subject. This thought made my mind it would be better that I would take up teaching which was strongly supported by my PhD advisor.

I would like to stop writing…In fact this is not the end and I would like to continue in the next editions of department magazine the different styles of teaching I worked on for the students to satiate my hunger for helping the students.

Water for all is our call

Drinking water is a basic necessity of human kind. According to World Health Organization (WHO), it is estimated that 11% of world population (~780 million) are living without access to an improved drinking water source and some rely on microbiologically unsafe waters. Water contaminated with pathogens like bacteria, viruses and fungi cause several water borne diseases like diarrhea, nausea, dysentery. The transmission of water borne diseases occurs from contaminated drinking water and swimming waters. Hepatitis A, Leptospirosis, Shiegellosis etc are some of the water borne diseases that has an effect on human health. Those who are at great risk are the children under the age of five. E Coli is the organism that causes these diseases. It produces a toxin that damages the lining of the intestines resulting in hemorrhagic diseases .

The WHO estimates that 1.7 million people die every year worldwide from diarrhea diseases and 760,000 children of age five die every year. To address this problem research has been done extensively and resulted in many conventional methods like chlorination, filtration, ozonation etc which can effectively kill the pathogenic microorganisms. However the formation of carcinogenic disinfection by products limits their use. Therefore it is an urgent requirement to investigate some innovative processes which can overcome these difficulties.



Recent developments in this domain have led to some oxidation processes which are receiving increasing attention because of its potential to completely eradicate wide range of chemical as well as biological contaminants in water. Photo-catalysis an advanced oxidation process which involves the use of semiconductor photo-catalyst (ZnO, TiO2) and a photon source (UV lamp). It received worldwide attention due to its direct utilization of sunlight to achieve a variety of chemical reactions, renders to water splitting, organic pollutant degradation, and water disinfection. TiO2 is being the extensively studied semiconductor for photo-catalytic degradation of industrial effluents and microorganisms.

The mechanism of TiO2 is based on interaction between photons emitted by a light source and catalyst particles (TiO2). When a photon with energy greater than or equal to band gap energy of TiO2, 3.2 eV falls on the catalyst surface, electrons from the valence band (VB) gets excited to the conduction band (CB) leaving behind the hole. The formation of electron-hole pair on the TiO2 surface due to photo excitation leads to several redox reactions and generates highly reactive oxygen species (ROS)such as hydroxyl radicals (OH•), superoxide ions ($O2^{-}$•) and hydrogen peroxide (H2O2). The ROS reacts with various chemical and microbial contaminants resulting in the complete removal of these contaminants.

Though thorough research has been done on TiO2, solar energy induced disinfection is facing serious challenges, since TiO2 requires UV irradiation which accounts for only 4% of sunlight spectrum. Development of visible light (which accounts 52% of the sunlight), driven photo catalyst and understanding its mechanism by mathematical modeling is utmost important for the design of photo-catalytic reactor. The Visible Light Driven (VLD) photo-catalyst is accomplished by doping TiO2 with noble metals like Ru, Rh, Pd, Ag, Pt and Au.

The doped catalyst particles bring out an appreciable change in the band gap of titania particles as they bring out a shallow charge trapping on the surface of TiO2 due to replacement of TiIV by the dopant. Mutsunagaetal., doped Pt metal on TiO2 to study photo-chemical inactivation of bacteria and Kozlova et al., reported disinfection of various organisms by Pt/TiO2. Devipriyaetal., immobilized Pt/TiO2 on ceramic plates and showed photo-catalytic disinfection towards E.coli. R.A.R. Monteiroetal., modified TiO2 powders with different amounts of urea and calcined at different temperatures to degrade diphenhydramine and E.coli .

There is a need to check whether double doped photo catalyst has an effect on degradation of microorganisms. On the other hand to design a large scale photo-catalytic reactor, it is required to understand the mechanism of photo-catalysis rigorously. Mathematical Modeling of photo-catalytic degradation using chemical engineering principles helps us to accomplish this task and there is a little amount of work done on modeling. Sannino et al., developed mathematical model for photo-catalytic degradation of methylene blue (MB) with N-doped TiO2 under visible light in a batch photo reactor. Merabet et al., optimized and modeled the effect of photo-catalytic degradation of indole in UV/TiO2 using response surface methodology (RSM).

Synthesis of TiO2 particles by sol-gel method, characterization using XRD, BET surface analysis and studies of its effect on photo-catalytic degradation of E.coli was already carried out at our laboratory. These studies are compared with P25 Degussa (commercially available TiO2). It is intended to extend synthesize double doped TiO2 nanoparticles, like Pt-Ag-TiO2 and study their effect on degradation of E coli invisible light spectrum in a batch reactor. It is also envisaged to optimize and develop a mathematical model for photo-catalytic inactivation of E.coli. Understanding the degradation kinetics and its mechanism in batch reactor by writing mathematical models, with the principles of Chemical Reaction Engineering and Transport Phenomena will help to design a photo-catalytic reactor.

-Dr.M.Shiva Naresh
Associate Professor

Chemical Khelega

The Department of Chemical Engineering has always encouraged the students to actively take part in various sports and games events. The Department truly believes in the need for sports in one's life for overall personality development.

KABADDI- Chemical Engineering Department's KABADDI team (Boys) has participated in the Inter-Department KABADDI tournament and emerged as Winners of the tournament adding a leaf of glory to the Department's chapter.

THROW BALL – The Girls of the Department have actively participated in the Inter-Department tournament and have given a tough fight trying to become one of the best teams of ANITS.

BADMINTON – Dharmreddi Ramya Bharathi, II/IV B.tech an upcoming badminton player proved her skill and did a remarkable performance .She represented ANITS Badminton team at the ANDHRA UNIVERSITY Inter-college tournament and bagged 2nd prize making her one of the jewels of the Department.

TABLE TENNIS – Dharmreddi Ramya Bharathi, II/IV B.tech has performed brilliantly at the ANDHRA UNIVERSITY Inter-college tournament and has bagged 1st prize at the tournament Joel Sunadh Christin, II/IV B.tech an upcoming talented player has performed brilliantly at the Inter Department Table Tennis tournament and has bagged 2nd prize making him an valuable assests of the department

SHE IS THE ONE

She is the one
With the dried up tears in her eyes,
With the bright dreams in her eyes,
With the burning desire of an incomplete love in her eyes.

She is the one
Who lies to her heart about how undeserving she is,
Who fakes the smile when everyone is around,
And cries when the lonely nights strike her hard.

She is the one
Who is the support of her loved ones,
So strong, so brave and so positive,
Who would ever know that she is the weakest soul
When it comes to strengthening herself.

She is the one
Standing against all odds ,
Struggling with her flaws and insecurities ,
Searching for another imperfect soul with some perfect flaws .

She is the one
Who deserves all the love in the world ,
And she'll get her share from the correct source ,
Correct source need not be a guy of her age or someone who's attracted to her.

She is the one
Loved by her family,
A father , a mother and a sister,
Who admire her flaws like no one can ever admire.

She is NOT the one
Who deserves to be sad
Who is allowed to be upset because some blind people
Are unable to witness the real beauty of her ,
Who should rely on others for her happiness or sorrow

-Amrutha Yalla (II/IV, B.Tech)

MANIFESTO OF THE BRAVE AND BROKEN HEARTED

"There is no greater threat to the critics
And cynics and fear mongers
Than those of us who are willing to fall,
It's because we have learnt how to rise.

With skinned knees and bruised hearts:
We choose owning our stories of struggle,
By hustling over reacting and pretending to be different

When we accept our stories, they define us.
When we run from struggle, we are never free.
So we have to face the truth and look it in the eye.

We will not be characters in our stories.
Not villains, not victims, not even heroes.

We are the authors of our lives.
We write our own endings.

We craft love from heartbreak,
Compassion from shame,
Grace from disappointment
And Courage from failure.

Showing up is our power.
Story is our way home. Truth is our song.
We are the brave and brokenhearted.
We are rising strong."

-Brene Brown
RISING STRONG

-T.Hasmita (IV/IV, B.Tech)

IIT BOMBAY: A WELL TIMED EXPERIENCE

"For the first time you guys are going to Mumbai, be careful", "the vendors and drivers cheat and trick, be careful", "Even if anyone taunts you or pushes you to your limits stay calm because that's a new place for you". These were the words told by my father before we left to Mumbai.

Day 1: 5:00a.m and we arrived in the dream city, the economic capital of India 'Mumbai'. We took a taxi to the campus; the taxi driver charged us double the actual rate. We were helpless as we were new in the city. As soon as we got down, we saw a long queue in front of the IIT-BOMBAY main gate. It took us one and a half hour to get past the security checking. After the security checking we did a manual registration of our respective workshops at the help desk. We left to our allocated rooms and to our surprise we found out that the rooms are being shared among six of us. Day 1 taught me patience. We also learnt that bigger the stage, bigger the difficulties.

Day 2: 29th Dec was the beginning of the International Robowars. IIT-BOMBAY welcomed more than 500 colleges and witnessed over a lakh of participants from across the world. Creativity was at its zenith. It was fabulous to see that how the students of IIT-B took control of fest and organized events. Robowars was the biggest attraction of the festival. The crowd there was so lively and cheering.

Day 3: On the third day we explored the campus, visited many stalls, played few games too. We got to interact with students from other states like west Bengal, Orissa, Punjab, Chhattisgarh as well. The campus has a lush green cover and it also has its own beautiful lake called Powai Lake. Sophia, the first humanoid robot who got a citizenship from Saudi Arabia was about to come to the campus. By the time we reached the Convention hall we saw an enormous queue but still we took the pain of standing in the queue just to see Sophia. Sadly, luck dint favour us and the gates were closed. We still got to see Sophia on the live screen that was put outside the venue. It was an amazing experience to say the least

Day 4: It was our final day in campus. We woke up quite early, and reported at the seminar hall by 8am. We attended a workshop on Financial Fitness. It was a very good and brief session. It opened our eyes, gave us a clear picture on how to manage our finances. The reason why many working individuals are broke is because they fail to properly manage their finances. The session started at 9am and went on till 1pm. After an hour break the session continued till 5pm. On the way back to our rooms from the seminar hall we got a glimpse of all the Engineering departments. It was a very clean and peaceful atmosphere. The reason why IITs produce such quality professionals is because of the atmosphere in which they spend their undergraduate years. The day ended with DJ night which began at 6pm and went on till 10pm. It was a scintillating experience.

We thank my Head of the Department who gave me the opportunity to visit such a prestigious institution and take part in the TechFest which also happened to be Asia's largest science and technology fest. This opportunity gave me a lot of exposure and right knowledge.

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

CHEMFLARE
A Technical Extravaganza

Chemflare was started with the sole motive of bringing together students and to enhance their leadership qualities. It also helps in inculcating the habit of working in a team and as a team. The first event was organized in the year 2015. The event has evolved since its initial days into the grand colloquium named as Chemflare-2k17.

Chemflare-2k17

The Department of Chemical Engineering, ANITS had organized a two days National level Student Conference Chemflare 2k17 during 20 – 21 February, 2017. Chief Guest of the event Dr. A. Srinivas Kumar, Scientist G and Technology Director, NSTL, Visakhapatnam addressed the gathering and the role of Chemical Engineers in present world. He also discussed about the role of Chemical Engineering in a multi-disciplinary fields. Dr. A. Gangagni Rao, Sr. Principal Scientist, IICT, Hyderabad mentioned the importance of Chemical Engineering and its role in waste treatment. Prof. T. V. Hanumantha Rao, Principal, and ANITS gave a glimpse on current trends of Chemical Engineering. Prof. S. Subba Rao informed the gathering about the growth of Chemical Engineering all over the world. Prof. R. Govardhana Rao, Director, ANITS, Faculty of Chemical Engineering and Faculty from other departments, students and participants were present in the session.

Subsequently various competition and spot events were conducted and prizes were given for the same.The Souvenir C.D's containing the details of the technical sessions was released on the occasion and a formal vote of thanks was given by Ms. R. Anusha,IV/IV Chemical Engineering student.

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 Chemflare2k17 around 24 papers was presented. The event was conducted for a period of 2days.

Poster Presentation:

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

ELOCUTION AND TECHNICAL QUIZ:

This helps students in overcoming stage fear and in developing the communication skills of the students. Technical quiz event was conducted to test the knowledge of the students.

The Evening was reserved for the cultural events which marked the end of the wonderful tech fest.

SENSITIVITY, SENSIBILITY AND EMPATHY

-Dr.P.Mary Anupama
Sr. Assistant Professor

Sensitivity is defined as the state of being prone to, being sensitive to or it is the degree of responsiveness that people exhibit, to changes or challenges or demands. As we see these definitions, every individual has his own perception of using the same term for various reasons in various situations. But the term has different meaning in medical field, stating it as the capacity to respond to a stimulus.

How are we sensibly applying these terms to the situation happening around us? This term has been used by many people to exhibit their intolerance to criticism or feedback. Statements like "I am too sensitive so please talk politely to me" or "I am too sensitive to people". A personalized usage of this term has led to creation of walls around themselves, not allowing others to express their views, ideas or thoughts. Very wrong usage among children has made the parents go blank, leading to suicides for not purchasing a game or scolding them for time wastage to failures.

During the past decade, mindset of people has changed and sensitivity levels have further reduced towards society and also towards each other. One mile walk with friends was a fun, but today it is done only as exercise and not as a part of our routine life. If a person approaches for help, people used to welcome them home but now, such things are rare, except for partying and time pass. Elders stand in bus while youngsters avoid giving them place out of respect. Wishing each other is gone except of good morning wishes in social media. We do not move out of house to help neighbors, we just sit in our comfort zone and share stories of social awareness. We never plant trees, never take care of environment or any living creature around but share posts and videos in social media. We talk of sensitivity while we are insensitive towards social happening around. We talk of pollution and we ignore when it is our turn, to switch to Eco-friendly celebrations. We participate in competitions on social awareness, Swatch Bharath and patriotism, but we don't mind spitting in public places, littering roads and cause lots of noise pollution whenever we feel like. We are aware of air pollution and we still neglect our emissions from vehicles.

One of the pathetic situations which I observed in recent days was that a dead body was not allowed into an apartment premises in the name of custom. Society has advanced, and still bringing a dead person home, is objected by neighbors.

We are just "Big people with small hearts". The agony of the family has melted many around, and with long persuasion the body was allowed for its final rituals. You don't touch hearts of your family members, but talk about sensitive heart. We cannot render a helping hand to our colleagues but still say we are sensitive. You cannot feel the pain of desperate and destitute people, but expect immediate help. Man has become a mere taker and never a giver.

Sensitivity always goes with sensibility and empathy. A person, who can empathize with others, feels sensitive about other situations and feelings too. Sensitivity comes with social responsibility as well as responsibility towards family. It is term which is to be used with utmost care. We see this in small children who have no prejudice. They care for everyone around. A small boy of the age of 5 years pushes his mother tricycle happily enjoying the journey with her till home. A little girl talks about good and kind words to elders whose language of addressing changes with age. Small girl who is punished by teachers wipes off her tears and tries not to repeat mistakes with responsibility. Watering road side plants, taking care of animals, feeding destitute, social service, taking care of aged people within family, all these are the acts of sensitive people.

Sensitivity comes with understanding. A person who is quickly sensitive is inseparable from his ready to understand nature. Sensitivity is always strength and it is not a representation of weakness. Insensitivity is always a selfish attribute and is ugly, while sensible and empathizing people are always humble and beautiful.

LET YOUR SENSITIVITY BE A POWER THAT TRANSFORMS THE UNIVERSE AROUND.

COLOUR ENERGY

Using the different color energies to help bring balance to our lives is easy. It can be as simple as the color shirt you put on in the morning. If you have been feeling too withdrawn or tired, try wearing more red. If your household is too filled with energy and stress, add some browns or blues to the décor to calm the energy in the home.

Grey: Neutrality, Introspection, Stillness.

Silver: Openness, Intuition.

White: New beginnings, Imagination, Purity.

Pink: Affection, Friendship, Optimism.

Red: Love, Passion, Strength, Power.

Gold: Success, Courage, Setting Boundaries.

Brown: Grounding, Home, Stability.

Orange: Energy, Vitality, Luck, Magnetism.

Yellow: Creativity, Communication, Learning.

Green: Prosperity, Health, Abundance, Nature.

Blue: Peace, Hope, Healing, Patience, Truth.

Purple: Intuition, Deep connections, Wisdom.

Black: Protection, Silence, Elimination.

-T.Hasmita (IV/IV, B.Tech)

Adversity – Shade of friendship

"A Friend in need is a Friend indeed" is a proverb that stands true always. In our day to day life we come across so many persons and not all of them are our friends. God does not create friends, we make friends. Friends have some qualities in common that is how a bond is created. Their attitude, likes, dislikes and interests. There are different kinds of friends. Some true, faithful and casual friends while others are false. True friends are like one soul residing in two bodies. A true friend is one who comes to you when there is no one beside you. A true friend never shows you his back in your difficult times, even though he may frown upon you. A friend's frown is said to be better than a foe's praise. A true friend is like an old wine, he is the stimulating force. A true friend is the one on whom you can rely upon. In our day to day affairs we come across so many people who become friends for a purpose. Mahatma Gandhi said adversity is the crucible test for friendship, because that is when true friends stand while others fade away.

In the words of A.P.J Abdul Kalam ***"One best book is worth a hundred friends but on good friend is worth a library".***

-Ashifa Begum (I/IV, B.Tech)

JUST FOR FUN

Rahul: Bro, do u have CRE text book?

Shyam: Sodium Hypobromite

Rahul: what are you talking bro?

Shyam: N(a)OBrO

Ramesh: Dude what happens to NITROGEN when the sun rises?

Suresh: It becomes DAYTROGEN..!

EXPECT THE UNEXPECTED

I had no idea on my first day of my college. I abandoned my bus and had to travel 3km by foot. As expected I was late to class. When I stepped in, I got abashed by the teacher. But the day more for me in store as later on there was an event after a few days conducted by our college which was being hosted by our sophomores. I was totally unaware that all of us were to participate in that event and was totally shocked when my name was present in one of the groups. Abashed by the situation give to me, I completely gave up. My inhibitions weren't helping me either. I refused to participate in that event; the aberrant atmosphere was a great discomfort.

My friend wanted to abscond from that place. Everything around was making me more nervous and I had to get rid of these with one single stroke. I abnegated all others performances. Ours was the 7th group, my friend wrapped up all the slides, and then it was my turn to show the calibre of our group. I didn't bother about the situation and went with my flow. I was never centre staged, but the excitement grew exponentially when we came to know the results. We were adjudged the 3rd position in the competition. That will always be one of the most cherished moments of my life.

-U.Ravindra (III/IV, B.Tech)

DOṢTI

Dosti Sahil hai
Tufano ke liye

Dosti aaina hai
armano ke liye

Dosti mehtil hai
anjano ke liye

Bas meri ek khwahish hai
aap jaise dosto ko paane ke liye.

-Joel Sunadh Chiristin(II/IV, B.Tech)

JEJAMMA

Remembering my Jejamma (great grandmother)

My JEJAMMA (great grandmother) was a prototype of a typical village grandmother. She wakes up at dawn to the sounds of 'Suprabhatam' mantram from the nearby temple. After tea and bath, she sits in the balcony/veranda to read the day's newspaper. Reading was her favorite pass time, even though she had studied only till 3rd STD. Her favorite page is the one with accidents and deaths; she goes through it thoroughly to see if there is anyone she knows.
After breakfast, she goes around our garden and fields talking to the people she meets, the workers in our field, passers-by, neighbors and that is how she knows of the local news. After lunch she watches with her daily serials and TTD CHANNEL.

By the time me and my cousins were back from school, her friends would have arrived for the evening chat. The closed ones are my cousin's grandmother (a robust old lady who always said that she doesn't want much from life, her only wish was to live long enough to see all her grandchildren get married and have kids.) and two of her old maids, sometimes others joined in too. They used to discuss the latest developments of the village, gossip about their daughter-in-laws and interesting events in the newspaper.

Night time was story time. I used to fight with my cousins for a place in her lap. We loved listening to her horror stories which she used to tell with great zeal. One out of them was about the 'Boochi', a beautiful female vampire, who lives on the 'banyan tree' during the day time and comes down only at the stroke of midnight. She wears white sari, has long hair. She terrifies lone, young, night-travelers and what are left of them next day are only their nails found under the Banyan tree.

Then there was this charming, handsome man 'GANDHARVAN' who makes young unmarried women fall in love with him, takes away their youthfulness and energy. The pretty ladies would not be able to love a man again. They all came together, planned to come over this, told the villagers about Gandharvan. They finally crucified Gandharvan. His death was very terrible and his body deformed. It still gives chills to many of them who witnessed it. Even though some of her stories gave me sleepless nights, I loved them.

She passed away 3 months back at the age of 92 years. And I miss her.

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

Indian Armed Forces - A Source of pride

We often belittle our achievement which is a crying shame. A sense of pride has the power to raise person's hope from ordinary to truly extraordinary. Pride also has the power to make or break a person, and in times of despair and helplessness, can lift the spirit of a billion people. And there is a lot to be proud of amazing strides in info tech.

We have an army that defends the nation against all stupendous odds. A revolution in agriculture, a thriving free media, great institutions of learning and prostheses like the incredible Jaipur Foot that helped a shattered Afghan walk which are some achievements we need to be proud of. Protest moments of immense courage, like the Chipko movement and the one that saved Kerala's silent valley and even the dream factory of Indian cinema.

These achievements celebrate the spirit that is India and touches our soul with its heady mix of do good and feel good, things that make us swell our chests with pride, may be squeeze out a tear or two of joy, and fill us with a sense of appreciation and purpose.

India's fire wall

The defense services of any nation are usually a source of pride, reinforced by trial and heroism. India's are no different for the past seven months, more than half a million troops of the Indian army have been string out from the inhospitable saichen glacier in Jammu & Kashmir to sir Greek in the rann to Kutch as the part of India's coercive diplomacy against Pakistan

.

Even for a million strong force that has seen no respite since the 1980 s , this must have been a bit tiring. Be it operation Vijay in Kargil or the containing operation parakrama along the western borders, the army troops are relentlessly battling the enemy inside and outside the country's boundaries.

And even as the army is out fighting terrorists in Jammu &Kashmir, the air force is securing the skies from intruders and the navy is protecting the Nation economic interests on the high seas. The high moral and motivation of the armed forces remain an enigma despite the storage of officers, paucity of hi tech equipment "force multipliers" and poor carrier prospects. But the armed forces appear to have taken all these negatives in their stride and are actively pursuing the doctrine of turning India in a global military power.

Proud to be an Indian !!!

"You've never lived until you've almost died. For those who fought for it, life has a flavor which the protected will never know"

- K.S.S.N.V.V.Laxmi, (III/IV B.Tech)

IMPORTANCE OF VALUE'S

Once in a village there are 2 best friends , akhil and rahim. Rahim used to say that he misplaces and loses his pen very often. So that he use only cheap pens so that he need not worry about losing them. He was worried about carelessness habit.

Akhil has suggested to him to buy the costilest pen he could afford and see what happens. He did that and purchased a 22 carat gold pen cross pen. After nearly six months akhil met him and asked him if he continues to misplace his pen. Rahim said that he is very careful about his costly pen and he is surprised how he has changed! Akhil explained to him that the value of pen made the difference and there was nothing wrong with him as a person!

This is what happens in our life. We are careful things which we value most.

- If we value our health, we will be careful about what and how we eat;
- If we value our friends, we will treat them with respect;
- If we value money, we will be careful while spending;
- If we value our time, we will not waste it.
- If we value relationship we will not break it.

Carefulness is a basic trait all of us have, we know when to be careful!
Carelessness only shows what we don't value……..

-J.Sasidhar (II/IV, B.Tech)

JUST FOR FUN

Friend 1:do u know that the white bear dissolved in water
Friend 2: What r u talking? How is it even possible ?
Friend 1: Because it is POLAR

Fructose: Do I look FAT?
Maleic acid: No you look SWEET

Madhu: Why does hamburger yield lower energy than steak?
Chem.. Engg.: Because it is in GROUND STATE

PAST NEVER LEAVES

Beating of their hearts synced,
Blinks of their eyes synced,
They used to complete each other,
In a world which changes in a wink.

All they dreamt was to be together.
All they thought was to grow old together.
Never had they known that the destiny had some other plans for them.
All they knew that they had a world to live in together.

Time never stops, karma never forgives.
He never knew his past would bring him tears.
The fun he had then, became a sin now.
The joy then, became a pain now.

Shadows of sin or past whatever we call,
Haunted his happy world that he had with her.

Turning their sweetest dreams into the worst nightmare,

Leaving the corpse and draining the soul they had.

Now he lives with a smile on his lips and tears in his heart.
Now she lives in a crowd being all alone.

They say time heals all wounds,
But the wounds of love still leave a pain in the heart.
AND LOVE CONTINUES IN THE FORM OF PAIN....

-Y. Lakshmi Amrutha
(II/IVB.Tech)

TICKLE YOUR BRAIN

Friend 1: Do u have CRE text book?
Friend 2: Sodium Hypobromite
Friend 1: what are you talking bro??
Friend 2: Na(o)BrO

Friend 1: Dude what happens to NITROGEN when the sun rises
Friend 2: It becomes DAYTROGEN

#What kind of dogs do chemical engineers have?
"LABORATORY RETRIEVERS"

#What kind of fish is made of two sodium atoms?
"TuNa"

#What do you call a tooth in a glass of water?
" A one molar solution"

A neutron walks into a shop and says,"I"d like a coke."
The shopkeeper serves up the coke.
"How much will that be?" asks the neutron.
The shopkeeper replies, "For you? No charge."

STILL COUNTING...

I am very happy on becoming an Infoscion. To write this line I had gone through many ups and downs. At first I didn't score well in the practice sessions but repeated practice made me perfect.
After giving the written test, I was not sure if I will get selected or not. But as they say every cloud has a silver lining.
When I saw the list of selected candidates in written test, I was surprised to see my name in the list. It boosted up my confidence to clear the interview.
I thought the interviewer will ask me to write a code but the interview was a piece of cake with general questions. Those were "tell me about you" and the next question was about my project.
I answered confidently about myself. I was then asked to draw a flow sheet of my project work. I did that too. The interview came to an end with some queries from my side.
The final list of selected candidates had my name along with 76 other students. Finally dream turned into reality and my hard work paid off. Thanks to ANITS.

-P.V.Sai sudha

After giving the Infosys test, I could do nothing else but wish that I will be selected. And, I was over the moon when I got to know that my wish came true. I cleared Round 1 and was through to the final round "The Interview". I and my friends didn't know what to expect from Personal Interview. We were well prepared with our answers for "General" questions but what if they ask us something related to IT sector? We hadn't much idea, given our branch specifications.

While waiting in the interview room, for my interview, I heard that the interview was a tough nut to crack and also they were asking the interviewee's to write codes. It shook my resolve but then I decided that I'll speak my mind. My interview had been a "general" one despite all my fears. A few of the Questions were…

1. Tell us about yourself?
2 Why do you want to get into Infosys?
3. Tell about Your weaknesses?

I answered every question honestly. In the end, after I stepped out of the room, I was immensely satisfied with myself. I sensed that they were testing my communication skills and how I knew about myself. Later, while going home, I remember telling myself, "You've done enough. Now, let me just wait and see." When I got information from my friends that I made to the selected list of our college, I was so happy that my efforts bore fruits. It was a very nervous yet ecstatic experience. My Hard work had paid off!!
The happiness in my parents eyes was priceless…

T.Hasmita

MY INTERVIEW EXPERIENCE

Our only aim after 4 years of engineering was to get placed in a good Core company. Our main base started from Aptitude classes, where we started improving our communication skills and also we constantly worked on our academics while also maintaining a good CGPA. We were informed about "Deccan Chemicals" off campus 10 days earlier in A.U. From that day we recalled all the basics of the subjects we learnt all these years.

On the day of Interview,

The interview wasn't as hard as what we expected. The interviewer asked us about our favourite subject and basic three questions and checked our communication skills through personal questions. When we got the news that we cleared the interview process and received our call letter our happiness knew no bounds and our efforts bore fruits finally.

For all those who will be attending the interview we would suggest to maintain good CGPA with minimal communication skills.

We thank our entire faculty who have supported us through this journey.

-Y.Sriram (IV/IV B.Tech)
-Ch.Bhaskar (IV/IV B.Tech)
-N.Ram Prasad (IV/IV B.Tech)

Our Success Stories still growing....

Alumni Byte

Well, it was a really amazing experience at ANITS

I am proud to say that I am Alumni of Chemical Department of ANITS and special thanks to all my faculty members who were helping but at the same time strict, but today I realize the value of their words. They have helped me sharpen my technical and interpersonal skills.

I am very grateful to the institution for providing me with the best opportunities to excel and succeed in my career.

Finally a word for my juniors

"If you don't go after what you want, you will never have it,

If you don't ask, the answer is always no and

If you don't step forward, you will always be in the same place.

- Rebin Roy
2013-2017 Batch

My college has given me many memories to cherish for a lifetime. I was a very reserved girl, hardly spoke to anyone. But then my faculty and friends gave me the confidence to express my opinions. It was a journey which has enhanced my personality and groomed me in many ways.

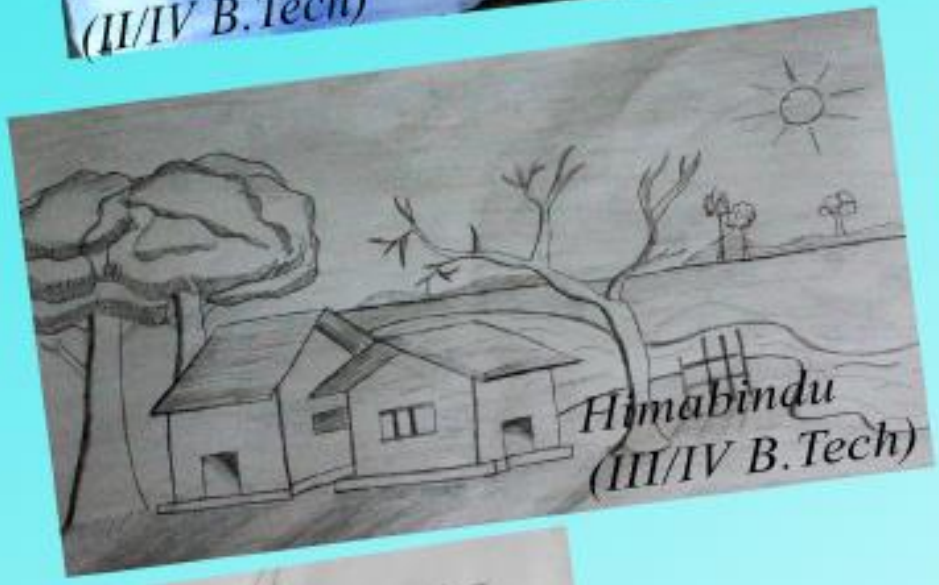
I would like to take this opportunity to thank all my teachers and friends for bring out the creativity which i never knew I had in me. We all learn many lessons in this journey of four years. Signing off with a piece of advice - "Always leave your mark behind".

- Sneha Mudunuri
2013-2017 Batch

portrays


B.Roshni
(II/IV B.Tech)


V.Bhavani
(II/IV B.Tech)


Himabindu
(III/IV B.Tech)


S.Sai Naresh
(II/IVB.Tech)


S.SaiNaresh
(II/IV B.Tech)


K.Vara Lakshmi
(III/IV B.Tech)

CHEM CLICKS


P.Sampath Kumar(II/IV, B.Tech)


S.V.A.S.Krishna Kumar(III/IV, B.Tech)


Abdul Quddus(III/IV, B.Tech)


P.Sampath Kumar(II/IV, B.Tech)


Abdul Quddus(III/IV, B.Tech)

Vizag The Third Cleanest City – Swachh Survekshan 2017

GVMC has taken leaps in exercising programs of its own apart from those set by the Ministry of Urban Development. Swachh Bharat is the country's mission and every city finds its own way to realize them. GVMC has taken drastic steps for improving the city. The results are realized practically and are sustainable too.

Municipal Commissioner Shri. M Hari Narayan inaugurated the first workshop. The workshop was jointly conducted by GVMC and Water and Sanitation for The Urban Poor. Visakhapatnam launched the first workshop in the learning initiative and the rest of the model cities took the series of workshops forward till December 22, 2017. City-to-City Peer-learning is the cornerstone of these workshops and Visakhapatnam is a champion here. 27 Urban Local Bodies and 50 NGOs from the city attended the workshop. The Chief Medical Officer for Health from GVMC was present and threw light on the progress in improving city sanitation and the goal -oriented approach in operations.

Swachh Bharat Mission has seen Visakhapatnam undertake a brave and daring effort in improving from an urban development to a Model City.
The acknowledgement is loud and clear

"A vibrant green city next to the verdant blue Bay of Bengal" these are the perfect words to describe the beauty of charming home. But that became passé for a time, thanks to the million-hooded serpent of a cyclone Hudhud that violently gate-crashed the shores of Vizag from inside Bay of Bengal, uninvited, on the dreaded Sunday the 12th October. Now in a throwback to the destruction and devastation of unimaginable magnitude, 'thanks' should 'perforce' be used and ANITS magazine rejoices with Vizagites in pride for "The City of Destiny".

WHY RASAGYAN WAS BORN!

Our Aims/Objectives:-

- To plough and extract the already existing creativity among the students.
- To develop analytical, thinking and writing skills.
- To create research oriented minds.
- To bring awareness about what's going in and around our campus.

From the Editor's Guild:

Guidelines for writing articles:-

1. There are no restrictions for writing articles. It is not necessary that the articles be related to any particular field.
2. Articles related to our Department are given more preference.
3. Articles concerning current issues are given more preference.

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

Email: editor.rasagyan@gmail.com

SHOUT BACK AT US

Please do submit your feedback on this 1st Edition of our Magazine. We would like to know more about what our readers think and expect from us. Please feel free to chip in your queries, complaints, compliments, suggestions or any other feedback. Help us improve, and serve you in the way you want us to. We will never be able to account for much without your support. Write to us at the mentioned mail address. Healthy criticism is highly appreciated. Thank you for sparing your time with us!

— ***Editor-in-chief***

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