



THE FOURTH ESTATE — COGNOSCO

DEVELOPING THE FUTURE OF INDIA'S
PETROLEUM AND ENERGY INDUSTRY

"Institute exploring alternative energy resources with top
most priority."

- Dr. VSRK Prasad

COGNOSCO

**“COGNOSCO” IS A LATIN WORD THAT ORIGINATED IN 1982 MEANING QUINTESSENTIAL ENLIGHTENMENT. THE QUEST TO ACQUIRE, GAIN AND ACHIEVE. THIS WORD COMPETENTLY DESCRIBES THE ULTIMATE AIM OF THE ESTABLISHMENT OF IIFE. IT EVINCES THAT THE STUDENTS WILL THRIVE TO ATTAIN EXEMPLARY KNOWLEDGE AND LEARNING FROM THE INSTITUTE. THIS COGNIZANCE SHALL ALWAYS BE CARRIED FORWARD TO THE COMING BATCHES AND OUR INSTITUTE WILL KEEP PROSPERING. INTRODUCING THE NAME OF THE 3RD VOLUME OF THE IIFE NEWSLETTER -
COGNOSCO**



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From the Director's Desk

DR. VSRK PRASAD

M.TECH. PH.D, PGDES,
M.I.I.CH.E, FIE, MISTE



It gives me immense pleasure to know that IIFE is bringing out Newsletter Vol 3 - Issue 1.

For any budding institute problems are inevitable and IIFE is no exception. However, thanks to the support rendered by the Ministry of Petroleum and Natural Gas led by honourable Shri Dharmendra Pradhan ji, HPCL led by chairman of governing body and CMD of HPCL, mentoring team led by Prof. Sudarsan Neogi, IIT Kharagpur, Andhra University led by G. Nageswara Rao and all other neighbouring educational institutions, the impact of the problems was reduced to comfortable and bearable levels. Thanks to our disciplined soldiers, that is our students in understanding and extending their cooperation. Thanks to the faculty who are over coming all the constraints and thanks to the supporting staff. The institute is undoubtedly overcoming all these issues without sacrificing the standards.

The best part of its success can be demonstrated through many examples including periodical release of newsletter every semester, computer lab, running the innovation lab as the part of the curriculum, which is happening in the very few institutes in the entire country, etc. Further, I am very pleased to inform that the status of the institute has been approved by the parliament and now in form.. I am even happy to share that there are number of students bringing laurels to the institute by winning quiz competitions, paper presentations, poster presentations at national level and the students are also excelling in sports too. I congratulate the Newsletter team – Dr Manasa, Dr Sudheshna, Dr Ashalatha and Dr Arun Pujari and the team of students for bringing up such a good newsletter inspite of heavy constraints.

I wish everyone all the best.

Date : 01.08.2019

(Prof. VSRK Prasad)
DIRECTOR

KARGIL VIJAY DIWAS

25TH JULY 2018

Kargil Vijay Diwas named after the success of Operation Vijay. On this day, 26 July 1999, India successfully took command of the high outposts which had been lost to Pakistani intruders. Kargil Vijay Diwas is celebrated on this day every year in honour of the Kargil War Heroes.

Therefore, IPE has taken a step forward and celebrated this day in order to commemorate the success of Operation Vijay and to pay respect to the brave soldiers and men who laid down their lives for the country.



The event started by lighting of lamps by our honourable director Prof. V.S.R.K. Prasad. The dignitaries shared the story of Vijay and motivated students to become patriotic citizens. Dr. Swambabu shared the story of one of his friend in the army who fought during the bombings in Delhi a few years ago. He shared the plight of such soldiers who lay down their lives for the country, (leaving behind their families who have to survive the consequences) or are forced to retire after suffering major injuries to lead a meagre lifestyle. He encouraged the audience to consider ways to support and help such soldiers and be empathetic to their needs. Both professors and students took active participation in the event and shared their views and experiences with the gathering.

S NAREN KUMAR REDDY

START-UP SCHEMES (NRDC)

4TH AUG 2018

The National Research Development Corporation (NRDC) organized a Workshop on "Start-up Scheme" with an aim to fill gaps in the economy for growth and development of new businesses, help boost digital entrepreneurship at the grassroots level from IOCL to Start-ups of AP at Conference Hall, Sunrise Incubation Hub, APIS, Hill-3, Madhurwada, Vishakhapatnam.

NRDC invited Indian Institute of Petroleum and Energy to attend the meeting. Some of the second year students of IIPe attended the meeting. Many members from IOCL also attended the meeting where IOCL announced a fund of Rs 30 crore to support start ups

NRDC is in collaboration with Indian Oil Cooperation and Andhra Pradesh Innovation Society (APIS). Prof. Valli Kumari, CEO, APIS, started the meeting with her speech on innovative ideas. Dr. H. Purushotham, CMD, NRDC encouraged young entrepreneurs to come forward and utilize to the maximum extent, the support provided by the Union Government. He highlighted the fact that the government is keen on supporting start-up ventures on core technology areas. Mr. TSR Gopala Rao, CGM, Indian Oil, introduced IOCL start-up schemes (TPRE & BPRE) and the funding mechanisms followed by them.

S KAVYA

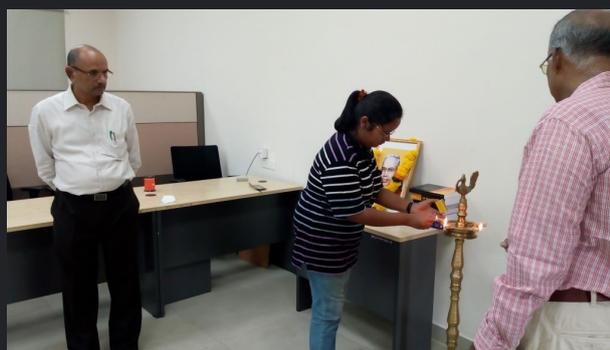
LIBRARY UPDATE

12TH AUGUST 2019

Indian Institute of Petroleum Library is named after Padmasri. Dr. S. R. Ranganathan, a renowned Research Professor in Library and Information Science.

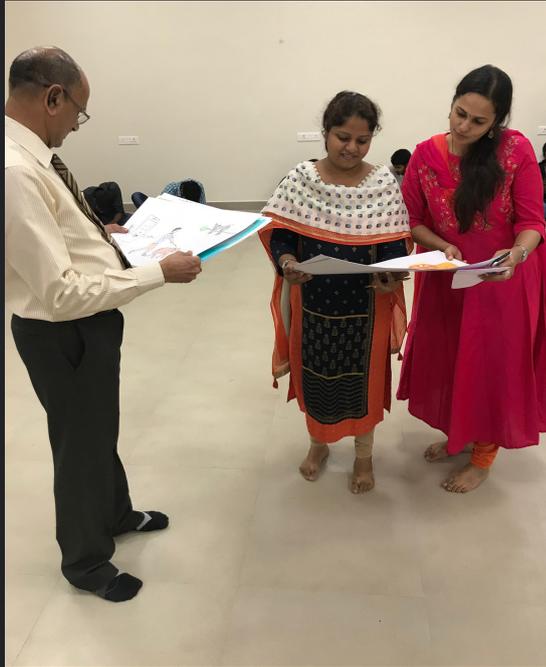
He was honoured as Father of Library Science and Information Science in India. Library is equipped books-2000 Volumes, e-Resources-65 Lakhs+, News Papers-3, Journals-3 and Magazines-10. Digital Library is provided with ten systems initially with LAN Connectivity, to browse the E-resources. Libsys Software was purchased at a cost of Rs.3.5 Lakhs for the management of Library.

Librarian's Day will be celebrated every year on August 12th, on the eve of Dr. S. R. Ranganathan's Birthday.



SWATANTRATA DIWAS

14TH AUG 2018 / 15TH AUG 2018



On the eve of our country's 72nd Independence Day, we the students of IPE organised a formal event in memory of our martyrs. The event started at 9:30 am and lasted for approximately two hours. As a part of the Independence Day event, a poster making and an elocution competition were organised for the students of IPE on 14th August. "Independence" was the theme of the poster making competition. The first year students had prepared the parade and patriotic formations to exhibit after the flag hoisting ceremony. Unfortunately, it could not be exhibited because of the unfavorable climatic conditions. The ceremony began with the speech of our honorable Director, Prof. V.S.R.K Prasad. This was followed by student interactions and ended with snacks as always.

MUKESH KUMAR & ABHINAV BHARADWAJ

JNANABHERI

23RD AUG 2018

Jnanabheri, the educational summit was organized by the state government of Andhra Pradesh on 23rd August 2018.

We IPEians were cordially invited to the knowledge exchange summit along with many other students from different universities. In the morning session, there were many cultural programs and speeches delivered by great personalities, depicting the heritage and culture of Andhra Pradesh state.

In the afternoon session, the event was graced by the presence of our honourable Chief Minister of Andhra Pradesh, Shri Nara Chandra Babu Naidu. Many innovation stalls were arranged in the event and students from different colleges exhibited their projects to the gathering. In the end, the students were inspired by Shri Chandra Babu Naidu who spoke about different advancements in the state especially in the science and technology sector. He pointed the pivotal role of students in shaping the future of the state. That was indeed a memorable event!

K. RESHMA REDDY



The reason we race isn't so much to beat each other, but to be with each other. With this enthralling thought, our institute organized a riveting event, the "Friendship Race" at AUCE on 1st of September, 2018. As the name suggests, it was essentially conducted to initiate freshmen interaction with their year mates, seniors and the professors along with promoting physical and mental fitness.



Our honourable director, Prof. VSRK Prasad graced the event with his active participation. Even our Sports Coordinators ran along with the students to keep the spirit of the competition alive.

The Sports Committee members did a great job managing everything. Students were provided with energy drinks at regular intervals on the defined track. It was a refreshing and fit morning for all of us.

Coming up with a positive impact, this race created great camaraderie among the students. Many of us had a proper interaction with each other for the first time since our classes commenced. The winners were awarded with certificates from our Director on the Teacher's Day. It was an amazing experience being a part of this competition.

BHAVYA KUMARI



Teacher's day is a special day dedicated to all the teachers, as we all know Teachers day in India is celebrated every year on 5th September to honor the contributions of a teacher in education, society and country. A joint effort was made by all the members of IPE to celebrate teacher's day on this day. The event started by 5:00 pm in room no 311.

The hall was brimming with students celebrating teacher's day with loads of love and respect for their gurus (teachers). A short program was organized starting with our honorable Director, Prof. V.S.R.K Prasad's opening remarks. He addressed the students about the great challenges faced by the teachers and inspired the students.



The event continued with the speech by Adhi Vishnu, a third-year student, who explained to all the students in a detailed manner about the efforts made by each and every teacher at IPE. He explained the inner meaning of "TEACHER". Then Dev Kumar Ashok, second-year student, gave the speech explaining the efforts of every teacher of IPE. Then plant saplings were given to the teachers as a small token of love. Then some of the teachers spoke to the students and appreciated them for their efforts in organizing the event. It was a memorable event for all of us at IPE.

"A GOOD TEACHER CAN INSPIRE HOPE, IGNITE THE IMAGINATION AND INSTILL A LOVE OF LASTING"

T LALITHA SRIDEVI



FRESHERS' DAY

CROESO 2.0

7TH SEPTEMBER 2018

After a hard turmoil of several years, we all come to college to do our graduation. Ha-ha, I'm kidding, we come here to make memories in this long vacation of four years, to shape our future and come out with flying colors in the long run of life. And equally important is the practical knowledge we gain, the way we have to treat our life, when it treats us badly, and to survive in this world of competition.

So, to accomplish our welcome in our new institution, our seniors organized the most awaited event "CROESO 2.0", the Fresher's Party 2k18. It was love at first sight, or so did I think when I saw the arrangements our seniors did for us in the YVS Murthy Auditorium. The ambiance there was awesome, and it clearly showcased that all the hands were put to desk to arrange this auspicious day. "Eu doux eclatant" was the first phrase which came to my mind after entering the auditorium and having a look on the decorations. A legitimate justification was given to the name "Croeso". And the students too were dressed as aristocrats and business tycoons, and the girls too wore effulgent and ostentatious traditional and western dresses.

We had Prof. VSRK Prasad (Director, IIPE), Prof. Peri Sarweswara Avadhani (Principal, AU College of Engineering) and Prof. O.R. Nandagopan (Director, NSTL). They first lighted the pious lamps and then they sliced a piece of their experience and laid it on our plates for us to flourish it in our lives. Prof. O.R. Nandagopan assured all the students that good placements after graduation and internships would be proffered to the students when the time comes.



Then started the full-fledged program in its full swing. It started with several dances and songs. I personally liked the dance by the first year's girls and a lyrical performance by Rohit Bindal, and singing performances by Ayush Tyagi and Rohit. The anchoring done was very nice and people were having a ball. And as u know, an auditorium filled with around 300 bachelors can give you a hoot, that can deafen you to the core. There was a lot of applause and cheer.



The major attraction was the stand-up comedy sequences done by Vaibhav Sharma and Prateek Tiwari. They were like show stoppers for the entire day. Then came in the time for The Ramp Walk. Many boys and girls participated in the ramp walk and they all filled the stage with radiance and opulence. The title of Mr. Fresher was backed by Saurav Goyal and Pragati Raj won the title of Ms. Fresher.

Then the program stepped towards the end. There was a very entertaining and mind blowing skit presented by some of the students of first year. The shortage of mics made it way more entertaining. There was a lot of applause and cheer. The program ended with dances where around 200 students were dancing together. We all enjoyed ourselves to the fullest. It all was followed by a zestful dinner which served as a break from the boring mess food. Ergo, that we all went to our homes and hostels and cherished the memories in the way and ever after.

SHAKSHAM GUPTA



ELECTIONS

25TH JULY 2018

On 19th Sept, 2018, IPEians experienced their yearly election. There were nominees taking stand for President, Vice-President, General Secretary, Treasurer, Joint Secretary and other committee secretaries. Coming to the procedure, on the election day candidates needed to fill the registration form with signature of two of his nominators. Along with this they had to attach a "Statement of Purpose" mentioning their worth to the post. The same was later scanned and e-mailed to each voter which helped them to know more about the candidates. Before the voting started, candidates standing for President, Vice President and General Secretary had to deliver a speech. The topics were given on the spot and they were provided a couple of minutes to prepare for the topic. The topics were related to their subject of studies. The main part was the online voting system that was introduced this year through the combined efforts of our faculty. The voting took place in our computer lab. Each student was directed to login and vote for the various posts. The process of this online voting system ended soon in an organized manner. Later results of the elections were announced by our respected Director Sir who congratulated and encouraged both winners and other nominated candidates for participation. The results of election were later emailed to all the students and the results are:

PRESIDENT: DINESH CHANDRA VARMA, 16PE10005
VICE-PRESIDENT: T NITHYA SRI, 16PE10045
GENERAL SECRETARY: NARAHARA SETTY SWABHAAV, 17CH10024
JOINT SECRETARY: APURVA SUMAN, 18CH10033
TREASURER: B ASHISH KUMAR, 17CH10009

SECRETARY OF THE COMMITTEES

LITERATURE AND CULTURAL: UJJWAL JITENDRANATH TIWARI, 17CH10036
EAA: KARRI GOPAL, 17PE10029
TECHNICAL EVENTS: ROHAN ANAND, 16PE10047
SPORTS AND GAMES: AKASH CHOUDHARY, 16PE10015

CLASS REPRESENTATIVES

FIRST YEAR: BHAVYA KUMARI, 18PE10040
 VIKRAM S. L, 18PE10005
SECOND YEAR PETROLEUM: PAWAN KUMAR, 17PE10042
SECOND YEAR CHEMICAL: MD AMIR EQBAL, 17CH10017

THIRD YEAR CHEMICAL: VADLAMUDI DHARANI PRASAD, 16CH10025

Thus, the newly introduced online system of voting avoided the need for the entire physical infrastructure usually required on a traditional voting. As a result of this a smooth election was conducted and results were also announced soon. Thus IPE 2018 elections came to an end in an organized manner with the combine efforts of our dedicated authority and students.

APURVA SUMAN

MOU WITH UNIVERSITY OF HOUSTON

ENTREPRENEURSHIP- THE WAY TO REDUCE UNEMPLOYMENT IN INDIA

The Indian Institute of Petroleum and Energy (IIPE) signed a Memorandum of Understanding with Cullen college of Engineering at the university of Houston(UH). This allows both the Institutions to discuss opportunities to establish faculty exchange programs, student exchange programs, joint research Projects, and other types of academic activities and events.

The MOU is effective as of May 20, 2018. This MOU is valid for five years. Both institutions commit themselves to identify concrete areas of academic collaboration and to explore the means to achieve successful collaboration. The officials involved in this MOU From University Of Houston are :

Dr. Paula M. Short (Provost and Senior VP for Academic Affairs)

Dr. Jaime Ortiz (VP,Global Strangies And Studies)

Dr. Joseph W.Tedesco (Dean of the College of Engineering).

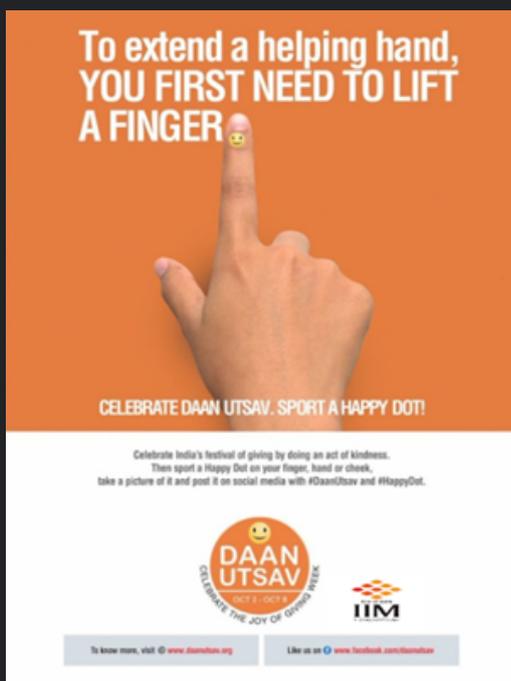
The Dignitaries Invovled from IIPE in this MoU are Prof. V.S.R.K Prasad

Prof.Sudersan Neogi (SPOC, IIT-Kharagpur).

S KAVYA

DAAN UTSAV

15 TH OCTOBER, 2018



To extend a helping hand,
YOU FIRST NEED TO LIFT
A FINGER

CELEBRATE DAAN UTSAV. SPORT A HAPPY DOT!

Celebrate India's festival of giving by doing an act of kindness.
Then sport a Happy Dot on your finger, hand or cheek,
take a picture of it and post it on social media with #DaanUtsav and #HappyDot.

DAAN UTSAV
OCT 1 - 10
CELEBRATE THE JOY OF GIVING

IIM

To know more, visit @ www.daanutsav.org Like us on @ www.facebook.com/daanutsav

DaanUtsav (earlier called the Joy of Giving Week) is India's 'festival of giving'. Launched in 2009, the festival is celebrated every year - commencing on Gandhi Jayanti - from October 2nd to 8th every year, providing you the opportunity to contribute time, money, materials to benefit an individual, organization or because it means something to you. Daan, in Pali or Sanskrit, connotes the virtue of generosity. This event was organized by Vatsalya, the social activities club of IIM Visakhapatnam. Indian Institute of Petroleum and Energy also participated in this festival, as a part of this some donation boxes are arranged in the college and all the faculties and students were notified about the festival and encouraged everyone to donate clothes, gadgets, appliances, books etc. A smiley sticker is given to all the Donors as a symbol of appreciation.

S. NAREN KUMAR REDDY



ONE DAY FIELD TRIP

THIRD YEAR - CHEMICAL ENGINEERING

15TH OCTOBER 2018

Needless to say, hands-on experience of something is always better than just having theoretical knowledge of that subject. One such opportunity came to us in the form of my industrial visit at Vizag Steel Plant (VSP) which is a unit owned by Rashtriya Ispat Nigam Limited (RINL). RINL is a state-owned navratna PSU under the ministry of steel. The plant was commissioned in 1992 and had an original capacity of 3mmtpa which was later increased to 6.3mmtpa. Further expansion is going on currently to increase the capacity to 7.3mmtpa.

As chemical engineering students, we first went to Coke Ovens and Coal Chemical Plant (COCCP). Coal is an important raw material in the manufacture of steel. As the name suggests, the plant is involved in the treatment of coal to produce blast furnace grade coke required for producing high-quality steel. Bituminous coal is imported from Australia for this purpose which is then sent to coke ovens. Coke ovens are large vertical vessels lined by refractory bricks on the inside and stacked side by side to form a battery of ovens. There are a total of 4 batteries of coke ovens with each having 67 ovens, which is a huge number. The ovens are loaded with 32 tons coal per charge from the top by a charging car running on rails over the battery. The car loads the coal from three different locations to avoid heap formation and ensure uniform distribution of coal inside the oven. It is then heated at 1400 to 1600°C in the absence of air for 18 to 19 hours. Once the coke is produced, the pusher car on the front pushes out coke through the back, where it falls in a car with a loco and transported to a cooling tower. Out of 32 tons, only around 27 tons coke is produced and rest 5 tons is converted to coke oven gas which is at around 800°C as it comes out of the oven. The gas is mainly composed of ammonia, naphthalene, urea, tar, and BTX. Due to stringent environmental norms and valuable chemicals it carries with it, it cannot be released directly to the atmosphere. Therefore it is passed through many other chemical processing plants:-

- Exhauster House: Gas is cooled and particulate matter is removed.
- Ammonium Sulphate Plant: Ammonia is removed.
- MBC Plant: Mechanical Biological and chemical treatment plant.
- Tar distillation Plant: Tar is produced
- BTX Recovery Plant

Our next stop was the blast furnace. A blast furnace is the heart and soul of any steel plant where the actual process of producing iron from raw materials takes place under extreme temperature conditions. The first look of a blast furnace completely holds you by surprise. As one starts to notice its humongous size and tons of hot metal flowing out of it like lava, one starts to appreciate the level of engineering that goes into its construction and operation which is about as interesting as it sounds.

There are three blast furnaces in Vizag Steel Plant. Trying to understand the processes and operation of equipment like heat exchangers and compressors which we had only read in books before by observing them physically, completed our knowledge about them in physical aspects. Apart from this, one also gets to learn about the practical problems which may occur during operation, and the ways to avoid or resolve them which are essential ingredients in the preparation of a complete engineer. All in all, it was a great experience for us interacting with highly skilled engineers at the plant. Industrial visits like this feed the much-needed motivation in students to learn more about their respective fields, which is sometimes lost in the midst of theoretical knowledge.



SUYASH MORCHALLE

FIELD TRIP - AN UNFORGETTABLE JOURNEY

(SECOND YEAR)

15TH OCTOBER 2018

Being the first field trip for us we were all filled with enthusiasm and were very excited to visit HPCL Visakh Refinery. We were picked up by the bus from our institute at 8 am and reached our destination by 9 am. For all of us it was our first field trip and thus our heads were full of intriguing questions like how would it be, what does it feel like to work there. The journey was tedious but our enthusiasm kept our energy level high. We were also accompanied by two of our faculty.

After a cautious security check we were guided to the cafeteria where we were scheduled to a PowerPoint presentation by Haripriya Ma'am, from the Training department, HPCL. She briefly explained to us about the core of a petroleum industry, like how does it function, what all they need as raw material and how an industry should function economically. After that ma'am told us briefly about imports and exports done by HPCL, Visakhapatnam. They primarily import crude oil mainly from countries like Egypt, Libya, UAE and export products like fuel oil, naphtha, gas oil etc to other countries. Then she explained to us about the layout of the petroleum plant with the help of a presentation and gave us detailed explanation of each and every segment of it, and at the end we came to know such huge industries like HPCL generate their own electricity to carry their own operations.

After the presentation we were finally taken in HPCL buses for the 'The Field Trip'. We were accompanied by HPCL officials. We could see the huge distillation units, dome shaped storage tanks, infinite number of small and big pipes joining one part of the plant to other, and continuously felt the essence of oil during the whole trip. In the course of the trip sir gave us an overview about all the elements of the plant that we came across. The duration of trip lasted for 20 minutes and at last sir addressed us about our future as a Chemical Engineer, how should we improve as an engineer and what vision we should aspire for as a good Engineer. At last he departed away by giving his best regards for our future.

We then moved back to our institute bus and were headed back to the college. We, students were deeply thankful to HPCL, (Visakhapatnam), Haripriya mam, who explained the working of the petroleum plant and motivated us to become the best Chemical Engineers.

SAMARTHYA RAJ SINGH

FIELD TRIP – AN UNFORGETTABLE JOURNEY

Coromandel

FIRST YEAR

16TH OCTOBER 2018

A field trip is something which is the most important as well as exciting experience in a student's life. We the students of IPE first year chemical branch got the chance to go on one such field trip to COROMANDEL CHEMICAL FACTORY. It was a great experience visiting and gaining knowledge about the chemical plant.

Coromandel chemical factory is one of the topmost in the field of chemical industry. It deals with the production of fertilizers and other chemicals. It produces a variety of fertilizers with different chemical composition as per the needs of the market and the farmers.

We started our journey from IPE campus and were escorted by our faculty, Dr. Ashalata Sreshty and Dr. Somnath Ghosh. We went to the plant in the morning hours and as soon as we entered the main gate we were welcomed by the technical chief. Later on we were showed a video on the factory's history and its present functioning. We were given a demo on safety measurements and were shown a video on actions to be taken in emergency situations. Later on we had an experience of visiting the factory and had a good view of the plant, the advanced machines and were fascinated by the technology used. After all this something more interesting awaited us. We had face-to-face interaction with the plant manager and safety head and they told us in detail about the plants working and the safety measurements used. Most of the students and the teachers had a good interactive session with the members of the plant and gained good knowledge of the variety of chemicals, their uses and came to know the vast field of chemical engineering. Later they showed us different chemicals like rock sulphur, NH_3 and sulphuric acid.

Everybody had a great time and gained knowledge and enjoyed a lot. The trip proved to be very fruitful. It proved to be a booster in one's understanding of the chemical branch and introduced us to a plethora of career opportunities. We thank our director of IPE, Dr. VSRK Prasad, for giving us the opportunity to know the working of an industry.

K SHANMUKH SAI

FOUNDATION DAY

20TH OCTOBER



Everything has its origin, it starts from a minute thought to a genius.... A thought, to change lives of millions. Passing many hurdles, it stands to grab the taste of infinity. One of those was Indian Institute of Petroleum and Energy, founded on 20th October 2015. Every year we celebrate foundation day on 20th of October. This time too, it was a grand celebration. Invitees were few b/ut important one, as like the President and the Director of Indian Institute of Petroleum and Energy. It started at 17:00 with lighting lamp, symbol of purity and warmth of knowledge followed by our national song, Vande Mataram. Students filled the ambience in joy with songs. There was enthusiastic vibe all around. Guests who attended the event shared their thoughts, encouraged us to work harder and smarter to achieve our goals and success in life. It was concluded by Lakshmikanth Patra sir giving the vote of thanks. This was followed by National Anthem.

ASTHA PATEL

RASTRIYA EKTA DIWAS

2ND NOV 2018 - 3RD NOV 2018

The birth anniversary of "Bharat Ratna Sardar Vallabhai Patel" is celebrated as Rastriya Ekta Diwas or National Unity Day. To symbolise it the Government of India constructed a 597 feet tall statue of Dr. Sardar Vallabhai Patel and is termed as the "Statue of Unity".

IPE celebrated this day so as to honour this great leader on his 143rd birth anniversary at 31st October. The Principal of JNTU Narsapur, Dr. Vamsi Krishna was invited to be the Chief Guest of the event and B.S.S Prasad, Chairman of Andhra Pradesh Pollution Control Board was the distinguished guest of the event. Motivational speeches were given by the president of the event, Dr. V.S.R.K. Prasad and other distinguished guests of the event. An oath of unity was taken by all the people present there. Dr. Vamsi Krishna gifted life skill books written by him randomly to the students. The day ended with a national anthem.



A MARALI

VIGILANCE AWARENESS WEEK

2ND NOV 2018 - 3RD NOV 2018

ESSAY WRITING / ELOCUTION / VIGILANCE WEEK RECEPTION / PHOTO AND ART GALLERY / PRIZE DISTRIBUTION

Every year, Vigilance awareness week is celebrated across the nation in the memory of the Great "Iron Man" of our country, Sardar Vallabhbhai Patel. This week is celebrated as a tribute to his actions in uniting our country and his great vision to make a corruption-free India. This year, the nation witnessed the Vigilance awareness week from 29th October to 3rd November, 2018 and the theme was "Eradicate Corruption-Build a New India".

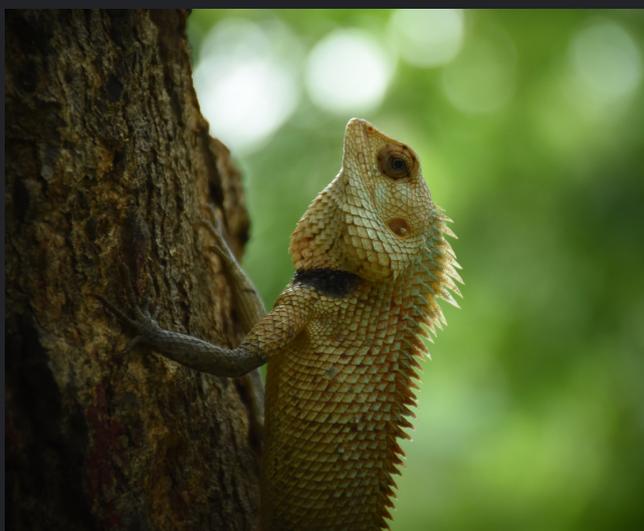


Vigilance awareness week was celebrated in IPE this year with an astounding energy. In the last week of October, a photography competition and an art competition was organized in IPE. The topic of these competitions was 'Unity'. On 31st October Rastriya Ekta Diwas, events were organized in IPE. These events were attended by many respected personalities. The importance of being united in today's time and how we, as a nation can stay united despite of our differences, was primarily discussed in the event. Later this week it was followed by an essay writing competition and an elocution competition on 2nd November. The topic of the essay writing competition was 'Value of discipline in life' and that of elocution competition was 'Eradication of corruption for the development of new India'.





On the last day of the week, an interactive session was organized in IIPE under the coordination of HPCL, Visakhapatnam. The event was greeted by the presence of Mr ASV Ramanan, the Executive Director, HPCL along with other dignitaries from HPCL, with Prof. S. Neogi and Prof. S. Ganguly from IIT Kharagpur. The respected guests emphasized on the importance of having a Corruption free India, the impact of corruption on our economy and how we can reduce corruption in our country. Dr VSRK Prasad, Director, IIPE, discussed that corruption is not just limited to its physical form, but it starts from our mindset and our thought processes. In the later part of the event, winners of all the competitions were awarded with their respective prizes and at the end everyone present in the event took the 'Integrity pledge' in unison, to fill their mind with a deep commitment of fighting corruption.



A Photography-cum-Art gallery was also unveiled at IIPE. The gallery displayed a wide number of photographs and art works by the students of IIPE. All the respected guests along with Director and other faculties of IIPE visited the gallery and appreciated the work of Art by the students.

Vigilance Week at IIPE was a great success. It reminded us the vision of Sardar Vallabhbhai Patel to make a corruption-free India. Now, it's our duty to realize the need of a corruption-free India and make his dream come true.

GAURAV SINGH



BEACH CLEANING

14TH NOV 2018

Maintaining clean environment is essential for us to prevent the spreading of diseases in our surroundings. To promote this Government of India implemented "Swachh Bharat" so as to spread the idea of cleanliness.



So to be a part of this big revolutionary mission the EAA committee of IPE under the guidance of Dr G Nagesh and Dr Himanshu Kakati organized a beach cleaning activity on 14th November at RK Beach. EAA committee took permission from CVMC for the cleaning of RK beach. The complete 2nd year batch participated enthusiastically and spread the message of hygiene by cleaning the beach. We were surprised to see the involvement as well as appreciation from the beach visitors and beach vendors for our work. At the end of exhaustive work snacks were distributed so as to rejuvenate everyone.



K GOPAL



Everybody like games, while some have interest in outdoor games like cricket, football, volleyball etc others like computer games. Sports meet is organized every year for the interested student who likes outdoor games to showcase their love and talent on the field. But this time technical committee helped in turning the gaming arena from reality to virtually and successfully conducted the "Let's Play" gaming event on 17th November at IPE campus itself under the guidance of Dr. D Sinha.

Popular games like Counter Strike - Global Offensive, FIFA and PUBG mobile were included in this event.

In CS-go wingmen mode was played with 2 people forming a team whereas in FIFA it was one on one battle. PUBG mobile was played with 4 people forming one squad a with total of 20 teams. All the 20 teams were made to play in all the three maps and winner was decided based on the points scored and after the completion of whole event tasty snacks were disturbed to the participants. Despite of the challenges faced, the combined effort and cooperation of participants led the event to a grand success.



IITB TECHFEST

THE AMALGAMATION OF SOCIETY AND TECHNOLOGY

14TH - 16TH DECEMBER 2018

Being a college student has its own perks, for various obvious reasons. We all can relate to it almost instantaneously. The friendships, the unknown trips, the thrilling adventures, the hangouts, the scoldings by professors, the late night studies and other countless experiences. These four years of college are undoubtedly a beautiful phase of life and here the most cherish-able memories are those of college trips.

The trip to IIT Bombay was our first trip after joining college. Our excitement wasn't hidden for long as we had a constant grin on our faces all through the train journey. We arrived on Dec 14th early morning all exhausted, yet got ready and left for the first day of the competition. Attending the 22nd edition of Techfest, Asia's largest science and technology festival was overwhelming. We got to experience the life there at one of the oldest and the most incredible institute of India. It was a three day fest from 14th to 16th of December, 2018. There was boundless energy and enthusiasm in the atmosphere. Everything was decked up for this giant gala, from the streets to the grounds to the competition venues. We were all awe-struck by its grandeur and the maddening crowd that had showed up for the festival.



"ONCE YOU HAVE TRAVELLED, THE VOYAGE NEVER ENDS...THE MIND CAN NEVER BREAK OFF FROM THE JOURNEY"

Our participation was in the Techfest World MUN (Model United Nations) as the delegates of different countries in the UNHRC (Human Rights Council). Two social and political agendas were discussed over a span of three days. In the limited time that we had after the End Sem exams got over, we gathered the requisite information about different policies and movements relating to the agenda and the political scenario of our respective countries. Pondering upon the topics, we had certain arguments ready to be raised in the formal caucuses. The first day was a bit challenging as most of the delegates were highly experienced and had strong motions against the other countries, but we gave our best and had appreciable involvement in the discussion. It turned out to be a great learning experience.

Everyday after our sessions got over, there were numerous other programs that kept us involved like the amazing Science Exhibition (interaction with Furhat - world's most advanced social robot and B-Human) and the War of Robots. We were stunned to see the tech-savvy minds of students making functional robots and putting them out in front for wars. We also witnessed a marvellous gaming competition on the second day. The fest had a series of lectures by eminent personalities. It was an honour to hear His Holiness - The 14th Dalai Lama, R. Chidambaram and Gaur Gopal Das speaking on enlightening topics. All this had us inquisitively involved in the festival and its happenings.

It's a wonderful vibe to feel the power of students around you, the young reckless ecstatic minds handling the entire fest so precisely and effortlessly. Visiting IIT Bombay was delightful. It imparted new vigour to our minds. Spending a few days in this city, the city of dreams, the city that never sleeps will always be an eternal memory in our minds.

BHAVYA KUMARI

SRI SURYA BHAGWANTHAM ENDOWMENT LECTURE

12TH DECEMBER 2018

Andhra Pradesh Academi of Sciences conducted “Dr. S. Bhagavantam Endowment Lecture” along with APPCB (Andhra Pradesh Pollution Control Board) in the premises of IPE, Visakhapatnam on 12 Dec 2018.

Many dignitaries from both AP Akademi of Sciences and APPCB were present in the meeting. While Prof. D. Raghunadha Rao, President, APAS, presided over the meeting, Sri. B.S.S. Prasad, APPCB, was the keynote speaker for the event. Prof. V.S.R.K. Prasad, Director, IPE was the distinguished guest at the event.

Sri. BSS Prasad, Chairman, APPCB explained to the audience about the Ease of Doing Business (EDB), and how it has been implemented in the state of Andhra Pradesh. Thanks to the highly efficient team at APPCB, Andhra Pradesh has topped the EDB list among all the states in India. He explained how all the procedures have been made online and transparent. The industry is given an index score and categorized as red, orange, green and white based on their pollution load. A white category industry need no environmental clearance (EC) whereas a ‘red’ category one needs to go through more stringent EC procedures.

He also explained the change in the trend in the way of implementing the pollution control policies by moving from a “only stick” policy to a “carrot and stick” policy. This means that waste utilization wherever possible is being encouraged, rather than just penalizing the industry for generating waste that is not treated and disposed properly. APPCB also gives feasible solutions to utilize the waste and turn it into a useful product. He quoted an example where 70 industries located in one campus, stopped burning their hazardous waste which used to result in huge amount of pollution and instead, started utilizing it by pre-processing it and sending to cement industry as an alternate fuel. This drastically reduced the pollution and would also save 5-10% of coal used in the kilns.



He also spoke about AP Investment Promotion Board, which expedites decision making for new industrial ventures. He highlighted the new project coming up in Ananthapur district of AP – KIA motors that could start their implementation a month ahead as all their clearances were through. He also mentioned that two other new industries were coming up shortly in AP.

He also pointed out that recently Visakhapatnam has faced severe dust pollution owing to the huge coal handling at the port. In order to curb the dust pollution, many measures were suggested such as use of sprinklers, MDSS (Mechanical Dust Suppression System), washing the tires of the vehicles going in and out of the area and covering upto 80% of the coal piled up into heaps in the port area. These have helped bring the situation in control.

DR. SUDHESHNA MOKA

INTERNSHIP REPORTS

APPLICATION OF CHEMICAL MASS BALANCE MODEL TO ANALYSE VOC EMISSIONS FROM MANALI INDUSTRIAL ESTATE, CHENNAI.

Earth is the only place in the universe that can support human life. It is very important that we realize this fact and take very good care of it.

Hey, I'm Swabhaav Naraharasetty of 2nd year-Chemical Engineering. During my 2nd year winter vacation, I did my research internship in Environmental and Water Resources Department, IIT Madras, Chennai. My interest in environmental and sustainability studies paved my way to take "analysis of VOC emissions in industrial estates through receptor modelling" as my area of research. I was guided by Prof S. Mohan, Civil Engineering Department, IIT Madras.

INTRODUCTION

According to WHO website, around 7 million die yearly due to air pollution. The survey also states that 9 out of 10 people on this planet breathe air that has pollutant more than the permissible level. While ambient air pollution affects developed and developing countries alike, low- and middle-income countries experience the highest burden, with the greatest toll in the WHO Western Pacific and South-East Asia regions. The anthropogenic sources often challenge the earth beyond its assimilative capacity leading to contamination and pollution episodes.

STUDY AREA

Manali is an Industrial area in one of the zones in the Corporation of Chennai, located in Chennai district, Tamil Nadu. Manali is the largest industrial estate in Chennai, being the home for a load of chemical industries and petroleum refineries. Manali Industrial area has been considered as a study area for the project, considering environmental concerns attached due to VOCs, and proximity to IITM.

My 25 days of internship were completely focussed on the "source apportionment studies" of the pollutants in industrial areas. According to USEPA, "relating source emissions to their quantitative impact on ambient pollution is referred to as source apportionment." Source apportionment studies helps us to get the quantitative estimates of the contributors to effected site.

RESULTS

My studies suggested that 43.2% of contribution is from the automobile releases, 4.3% from solvent using industry releases, 17.6% from petroleum refinery, 10.2% from waste water treatment plant and 16.5% from solid waste burning sites.

The exposure and knowledge I have gained in my internship is tremendous. Putting your thoughts into action and bringing results to analyse is what which makes it more interesting. Application of our knowledge to real world can be learnt during internship as compared to just class room study. This was my first professional experience and it has been great opportunity to work in IITM.

INTERNSHIP AT ONGC, RAJAHMUNDRY

IMAGINATION is what we do in the class when we listen to the lecture about the industry and I'm one of those who are interested in learning things practically. Sitting and reading the book for hours and hours can get too boring. I started my winter intern training at a well-known organization, Oil and Natural Gas Co-operation (ONGC), at Rajahmundry. During the training, I was assigned to the laboratory section of the company where I did experiments in oil laboratory and gas analysis laboratory. Analysis is important it may be in life or the observations done in the lab. Analysing different parameters of the crude oil and testing its properties are done in the oil lab and coming to gas lab we have to study the different components of gases in the given sample. They gave the crude oil collected from different basins like Kesinapalli west ggs and Thatipaka reservoir.

I analysed different type of parameters like density, specific gravity, pour point, cloud point, water content, distillation, base sediments and water, Saturates Aromatic Resins Asphaltenes (SARA Analysis) for crude oil. In the training, it was like a learning session because they used to give a small introduction and ask us to learn what all we can do in the experiment so that we can learn all the latest methods, then try in the lab and analyse the data. The most interesting yet difficult part of my training is the analysis of gas – to understand what the upstream companies mainly look for in the crude oil, to make it more 'purchasable' by the downstream company. As such the experimental analysis part is easy because there is nothing to do in the experiment just to inject the gas into the machine and wait for the report which gives all the composition of hydrocarbons and non hydrocarbons, calorific value and compressibility factor.

This industrial training taught me that basics are important in any industry and without the basic knowledge we cannot do any experiment. During my internship, they said one of the main reason for the fall of rupee value is petroleum sector, in which the innovative method developed by an American on the extraction of crude from the rock. Thus, it is an amazing experience I had as an industrial trainee.

ASHISH

FACULTY PUBLICATIONS

DR. LAKSHMI KANTA PATRA

BRIEFING

Estimation of scale parameter and functions of scale parameter has been studied under a general class of bowl-shaped loss functions of various location-scale families of distributions namely exponential distribution and normal distribution. We have proved the inadmissibility of best equivariant estimator by deriving various improved estimators. For this purpose, we have adopted the techniques of Stein (1964), Brewster and Zidek (1974). A class of improved estimators has been derived using IERD approach of Kubokawa (1994). Finally, a numerical study is carried to compare the risk performance of the improved estimator.

Statistical Papers
https://doi.org/10.1007/s00362-019-01090-2

REGULAR ARTICLE

Check for updates

Minimax estimation of the common variance and precision of two normal populations with ordered restricted means

Lakshmi Kanta Patra¹ · Suchandan Kayal² · Somesh Kumar³

Received: 1 May 2018 / Revised: 12 November 2018
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Statistical Papers
https://doi.org/10.1007/s00362-018-1052-7

REGULAR ARTICLE

CrossMark

Estimating a function of scale parameter of an exponential population with unknown location under general loss function

Lakshmi Kanta Patra¹ · Suchandan Kayal² · Somesh Kumar³

Received: 1 March 2018 / Revised: 25 September 2018
© Springer-Verlag GmbH Germany, part of Springer Nature 2018

COMMUNICATIONS IN STATISTICS—THEORY AND METHODS
https://doi.org/10.1080/03610926.2019.1568482

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Check for updates

Improved estimation of a function of scale parameter of a doubly censored exponential distribution

Lakshmi Kanta Patra^a, Somesh Kumar^b, and B. M. Golam Kibria^c

^aIndian Institute of Petroleum and Energy, Visakhapatnam, India; ^bDepartment of Mathematics, Indian Institute of Technology Kharagpur, Kharagpur, India; ^cDepartment of Mathematics and Statistics, Florida International University, Miami, Florida, USA

DR. SOMNATH GHOSH

Title: Effect of functionalizations and concentration of carbon nanotubes on mechanical, wear and fatigue behavior of polyoxymethylene (POM)/carbon nanotube (CNT) nanocomposites

Authors: Bhanu Kiran Goriparthi, Naveen P N E, Ravi Shankar H and Somnath Ghosh*

Name of the Journal: Bulletin of Material Science

Publisher: Springer

Link: <https://link.springer.com/article/10.1007%2Fs12034-019-1746-z>

Abstract: The mechanical properties like strength, stiffness, wear resistance and fatigue strength of polyoxymethylene (POM) was improved by reinforcing it with silanized multiwalled carbon nanotubes (CNTs) and functionalized CNTs. The material could be a promising candidate in plastic gear production.

Journal Snap Shot :

Springer Link

Bulletin of Materials Science
June 2019, 42:98 | Cite as

Effect of functionalization and concentration of carbon nanotubes on mechanical, wear and fatigue behaviours of polyoxymethylene/carbon nanotube nanocomposites

Authors Authors and affiliations

Bhanu K Goriparthi, P N E Naveen, H Ravi Sankar, Somnath Ghosh

Article
First Online: 27 March 2019

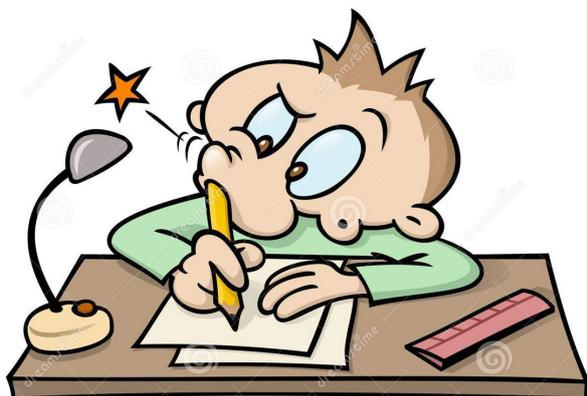
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SCIENTIFIC REPORT WRITING

Reports are essential to address a particular study of interest, which can be scientific, analytical, informational, valuation, case study, etc. Among different reports, writing scientific report is of particular interest to those who perform experimental and field-based research work. Hence, this write-up is intended to discuss the structure and key components of the report writing.

WHAT IS A REPORT?

A report is a concise, clear and structured document of investigation that provides information, analysis and interpretation of findings intended for a specific group of readers. It is a sequential representation of defined aim and objectives, relevant historic and current literature, specific questions formulated, research conducted to solve the questions and conclusions drawn based on evidence.



WHAT MAKES A REPORT EFFECTIVE?

A well-written report is an influential document. For a report to be effective, it should be simple, accurate, logical, well organised with precise headings, easy to understand and most importantly appropriate to the purpose and audience.

PURPOSE OF THE REPORT

The sole purpose of the report is to provide logical information, propose new concepts and options, analyse and solve issues, record progress, etc.

WHAT IS THE STANDARD LAYOUT?

Although there are no hard and fast rules on the structure of report, scientific reports follow a standard format to locate and find specific information of interest. The key components of a typical scientific report include:

- (i) **Title page** – An appropriate title attracts the reader's attention. This is the first page containing the title of the report, name and affiliations of the author.
- (ii) **Table of contents** – Provides an index of various headings and subheadings with appropriate page numbers.
- (iii) **Acknowledgements** – Give credit to people and funding agencies who supported the study to completion.
- (iv) **List of tables and figures** – Serial representation of various visuals, graphics and tables included in the report.
- (v) **List of acronyms** – Includes all the abbreviations used in the text of the report

(vi) **Structure of the report** – This section is the heart of any scientific report. Generally, it constitutes an abstract, introduction, review of literature, experimental methodology followed, results, discussion, conclusions, bibliography and appendix, which are briefed as below:

(a) **Abstract** – It is an executive summary that provides a glimpse of the overall along with a brief report on the significant findings.

(b) **Introduction** – It is a general description of the study, which highlights the importance and purpose of the work carried out and reported.

(c) **Literature review** – This section provides past and latest status of similar work performed by others and its significance.

(d) **Materials and Methodology** – This division details the successive description of various experiments, their requirements and necessary infrastructure used to carry out the study in an order. This section enables the reader to replicate the results following the exact methods under same conditions.

(e) **Results and discussion** - The findings from the experimental work are reported in the same order as performed. Subsequently, the output is discussed and the significance of the work is determined in terms of accomplishing the objectives and thus achieving the aim of the study.

(f) **Conclusions** – Overall summary of the outcome of the project and gives suggestions and ideas for future work.

(g) **Bibliography** – List of references that were used to support the work in the report work and provide further links for an extensive information on a particular aspect.

FORMATTING STYLE

A good report appeals the reader by its formatting style. Care should be rendered in maintain uniformity in formatting, for instance,

(i) usage of same font type, size and colour.

(ii) maintain uniformity in alignment, line-spacing, margins, indentation and paragraphing and background contrast.

(iii) grammar, vocabulary and sentence formation.

(iv) use simple past tense or present tense under appropriate sections of the report.

(v) follow bullets and page numbering.

(vi) headings , sub-headings, important words and points should stand out.



TIPS TO FOLLOW

(i) The quality of a report lies in its brevity and fluency.

(ii) All the visuals like diagrams, graphs, tables should be appropriately placed in the content with accurate and meaningful descriptions.

(iii) Diagrams and equation should be in the right place.

(iv) Proofread for several times for typos, grammatical and punctuation errors.

(v) Brevity in writing.

(vi) Contents should be clear, organised and complete

In summary, report writing is a skill and requires appropriate planning and insight. It is a media to define a problem, analyse and report solutions only from the work reported and propose alternative ideas or suggestions in a precise, fluent and sequential manner.

LITERARY CONTRIBUTIONS

ABSTRACT ARTICLES

Death: The single best invention of life

Life revolves around two words, Birth and Death. They exist together, inseparably. Birth, the beginning of a new life, is like sunrise, when everything comes to life and a fresh start occurs. While, death, the end of a precious life, is like sunset, when dejection and disappointment spreads across everywhere. But beauty lies in the truth that sunset is more alluring and peaceful than sunrise.

Ever given a thought to death? What comes to your mind? Fear? Sadness? Distress? All these feelings are quite usual to dawn upon our heads. Death terrifies us from beneath and gives us goose bumps. We wouldn't die even if we knew we'll go to the heaven after death. How magnificent would it be if we could get the key to immortality? No death. No pain. No fright.

But unfortunately that does not happen in reality. It's against the laws of nature. Nobody wants to die but we fail to acknowledge the fact that death has no escape. Our entire lives we fear from death but it is this fear that makes us want to take the best decisions and choices in life. When we think of us dying one day, the quest for everything increases exponentially. We start looking for things that excite us, people who make us happy, and the profession or field we love and find solace in. We don't want to waste time doing things that don't interest us. Death is the stage where there is nothing to lose. All pride, all fear of embarrassment and failure fade away with the thought of it because we are already naked, there is nothing more important than what we want at that time. All materialistic and external factors lose their importance.

Death is uncertain but our actions and decisions are not. They are in our control. So why not to make the best of it. Live and work each day as if it's your last. Contribute to your field and keep searching for new beginnings and other thrilling aspects of life. If you haven't found it yet, keep looking. Don't waste time living on someone else's expectations and have the audacity to follow your heart and intuitions. Try not to settle for limited things in life. NEVER SETTLE. Keep moving.

BHAVYA KUMARI

Fiction to Friction

Let me take you to a figment of imagination where we can check the terminal exactitude of our lives. A world where people age until they reach 18 and then stop aging until they meet their soul mate so that they can grow old together. "I'll never die". But imagine already being in a relationship at 18 and then you are twenty-two; you're both sitting in an orbicular park looking at each other and realizing that you both haven't aged a day.

Imagine platonically moving in with your best friend at 18 and then realizing a few years later that you've been aging together. Imagine purposely never finding your soul-mate so you can reign eternal. Surmising of this conjecture, I say, that we have stumbled upon the greatest romance/adventure concept ever.

What if you killed your soul-mate so you'd make sure you never aged?

This just makes the really want a story where the man antagonist is someone who has been killing his soul mate for centuries whenever they find them, and the protagonist is the newly re-incarnated version of the soul mate.

Stay with me. These soul mates are our dreams, the things we want to do in life, the career we want to pursue, the person we want to love. They are the things that you want should grow old with you, and not the things that people want you to grow old with. These are the abstracts that will wrinkle for a reason. There should be a life where the things you do, the love you show are made out of undocked interest, ample passion and not out of social and societal pressure. And people today just try to kill their soul mate and hope for a long life, but my friend, there is a difference between long and large. And this "large", my friend should not be compared with the materialistic commodities, the outer false pleasures which compel us to edge a constrained life. Life should be magnificent. We must do what we want to do, so that we don't have to endure existential crisis. This fiction somewhere connects and relates to the friction we have in our longevity and how we are just existing, not living.

No matter whatever you may do, the protagonist will always be the soul mate, either this one, or the re-incarnated one!

SHAKSHAM

The Phenomenal Ones

As a student who has only joined this institution recently, I have not been the most socially active. Back in my school days, I was kind of a big deal. The teachers doted on me and my peers admired me. Unfortunately, most social spheres are almost mutually exclusive. When I first came here, I did not have two friends to rub together and make a third. All of this, coupled with the fact that I am an introvert, turns me into someone who is not very likely to come across phenomenal people too often. However, come across them, I have.

Since I am a guy, I am going to talk about phenomenal women. Men all over the world realised the need for phenomenal women when they discovered that they are born anatomically incomplete. You see, we are born with huge, gaping holes in our hearts. You have probably experienced the uncomfortable feeling of having something brush against a bruise. It is ten times worse when something brushes against the hole in your heart. That is exactly why most people try to fill theirs up. Some fill it with money, some with art, music, literature. We have tried it all. For some reason the people who seem to be, the happiest are those who fill the holes in their hearts with other people. That is where phenomenal women come in.

There is no dearth of admirable women in this world. We have had women who have contributed to science, music, art, literature, society, and politics. However, no matter how many people you admire, there can be only one you consider truly phenomenal.

Have you ever felt serene? Have you ever felt the perfect blend of peace and satisfaction with the gentle sun on your back and shoulders and the cool autumn breeze ruffling your hair? Have you felt anything remotely close to that? That is how someone phenomenal is supposed to make you feel. You and I would feel microscopic, standing in front of a skyscraper. An architectural expert, on the other hand, would not. Neither would a student of art while looking at Mona Lisa. They would feel what your phenomenal woman makes you feel. It is a strange mix of awe and pride. Awe because of the magnificence of it and pride in your ability to recognise and appreciate that magnificence. A man looking at his phenomenal woman is nothing short of God looking at all of creation.

ABHINAV BHARADWAJ

When Teachers turned into professors

As a 3 year old kid, the very first strange experience to me was “school”. School- a place packed with children of all ages and kind, praying, whistling and playing all around. And amidst them, there were my teachers- teachers who liked me, teachers who hated me and teachers who had no idea about my existence.

Away from home, with all these unknown people, school going turned out to be my first insecure feeling I ever had. This insecure and timorous feeling along with whole lot of tears for skipping school, partially achieved coercing for sending me school and sweet bribes get faded away with time. And my varied experiences with my teachers got settled down. Now it was the time when I loved my teachers and got loved back too!

Years passed and my 3 years of JEE preparation boiled down to my college, Indian Institute of Petroleum and Energy.

This was the beginning of a new chapter. A total change in life was witnessed, be it the food here, ambience, people, language, emotions and everything else.

IPE, being one of the premier institutes of India, promises to provide best of academics, sports and other activities. However, being a new institute it has its own struggles. Being in the 3rd batch of IPE, I have acknowledged that there has been lot of developments in college in the past 2 years as my seniors have told.

On the very first day of college, I knew it was going to be an altogether different ride for me. This was the place and time to explore myself and my different interests. The freedom to think differently and the credence to be different was here, right here!!

And professors give the best guidance one can be in.

In the end I would say teachers of professors- the influence and impact of the best one is always felt.

TIME TRAVEL – PLAUSIBLE???

Time travel is one of the most prominently discussed topic among scientists and students interested in science all over the world. The scientists, Albert Einstein and Stephen Hawking, have proved time travel. But the problem is both of them were theoretical physicists. Both of them proved that time travel is possible only by mathematical equations. Now the question is raised whether it is practically possible or not? For this, we need to understand very deeply about what time travel actually means.

BLACK HOLE: An open door to time travel.

When the fusion reactions happening inside a star come to an end, the star emits a very large amount of light and explodes as a supernova. This marks the beginning of a black hole. As soon as the star dies, due to extremely large amount of gravitational pull the remaining particles of the star come together closely to form black hole. In simple words, when you compress a mountain to a size of a peanut, it forms a black hole. When a light passes near a black hole due to extreme gravitational pull on the light it goes into the black hole and never returns. That is why black hole is black in colour.

Black hole has the fourth dimension which is nothing but time. Travelling through black hole is the best way to do time travel because time is a dimension in black hole. For example, if a person is entering a black hole while seeing the earth, as he enters he will observe that earth is spinning very fast. So time runs very slow inside a black hole such that it becomes almost a constant in the black hole. Hence time is a dimension in black hole.

TIME DILATION AND SPACE-TIME:

Time dilation term was coined by Einstein, which is a door to time travel. Maxwell stated that speed of light is constant irrespective of the observer's speed, location or direction of observation. According to Newton's law, speed is not an independent quantity, it is always measured with respect to another object or observer. These two statements contradict each other, so it started eating Einstein's brain. But, an idea struck in his mind which changed the Modern Science. Both of the statements would be true only if the time slows down. So, here is where the "time dilation" term comes into picture. In order to have same magnitude of speed for the light, the time is compromised. For example, if a person travels with a speed of light, he would observe his watch to tick slow. Hence at very high speeds (near to the speed of light), the time moves so slowly that it remains almost constant and turns into a dimension. Hence it gives an idea to think about time travel.

When we consider time travel to be a dimension, then the total universe can be considered a 4D object. Hence, the space and time coexist in order that the universe is sheet of space–time where all the celestial bodies rest on the sheet. Gravitation also influences time dilation, time runs slow in a area having greater gravitational pull compared to less gravitational pull. Time dilation was experimentally proved by scientists by using atomic clocks. They had put atomic clock in a supersonic jet, which travelled around the world at very high speed and another one in the ground itself .They finally observed that there was nanosecond-difference as accurately calculated by the Einstein’s equation of time dilation.

Philadelphia Experiment: A proof of time travel?

The United States government in 1943 conducted Philadelphia experiment during the Second World War against Germany. The aim of the experiment is to make a ship invisible completely and teleport it to the enemy’s place and attack them. The experiment was initially conducted without any human beings in the ship. As it showed positive results, now they wanted to try using human beings. So, they added 100-crew members to the ship. They wanted to make the ship appear again in another coast of the United States so that they can check the success probability of the test. The experiment used high amount of magnetic flux to make teleportation possible. High amount of magnetic flux was created around the ship with crewmembers. Suddenly, ship was surrounded by cloud, a flash appeared, and the ship with the crew disappeared. As expected, the ship appeared in the expected place of arrival, but with a disaster. The improper rearrangement of the atoms of the human body led to the death of 50 crewmembers. But, the story doesn’t end here. In 1983, that is after 40 years of the experiment, 50 people of the crew have appeared in the same place showing that they have done time travel, which give us a solid proof that time travel is possible .But scientists were not able to explain what made them time travel for 40 years.

CONCLUSION:

We can see that time travel is possible logically and mathematically. If we see time as a dimension, then time travel is a most reasonable thing. But, if we don’t think in that angle, it seems like a unfathomable concept. In this constantly growing scientific world, in the near future we can expect that we can do time travel. Before electricity was, discovered people thought that producing light was impossible. Likewise, in future, we may end up doing the time travel though if not today.

A. BALAJI

POEMS

COTTON CANDY

A beautiful smile
 With a stormy sky
 A special face
 With a gentle touch
 A special someone
 With a stalwart kiss
 I call you puppy love
 Cause you prestige my lonesome winged dove

Your colorful sleeves marked with an emblem on your arm reveals your fidelity
 Those simple yet beautiful stares make me flush
 You being my concealer every now and then make my senses go shush
 I'm dying to know you, to crawl in between your words and mine

You should smile more
 Freaking out the crimson flare inside me
 Quivering
 Petting
 Fuming
 With those butterflies and jitters your presence makes my heartbeat fast
 Longing me to forget my past
 And those pristine stuffers wanting you to stay making my moment last
 Your nose short and scrubby
 Your ears hang low
 You bring back the stick
 No matter how far I throw
 Come on, let's go for a walk in the garden Rover !!

SHAKSHAM GUPTA

I REINCARNATE

I was in fear
 because nobody was near.
 The thing I had felt
 it let me melt.
 My heartbeats were so fast,
 I thought that day was my last.
 But the light of hope never died,
 And I reincarnate alright.

ASTHA PATEL

LOST EARTH

Corroded it is.
 Beautiful it was.
 Degraded it became,
 since we came.
 Lots of birds,
 lots of trees.
 Many rivers and
 many seas.
 Like a mother to us,
 habitable it was.
 Lost it is.
 Earth it was.

ASTHA PATEL

GLEE

As I walk along the sea
 I wish to feel free and flee.

The tide, what I see in them
 Simply awesome and kills my boredom.

The sparkling sun showing its bright face
 Pours the energy on me to smile always.

The morning sand kisses my legs when I walk through
 Takes my mind to feel impeccably the true love though

The rush of water soaked my legs wet
 Stood still which made my heart melt.
 As the sea breeze caress across my ears
 Warmth my heart and poured positive vibes.

All the way from the deep sea the tide comes to kiss
 I lose myself from this world and feel the bliss.

A BALAJI



Agrani



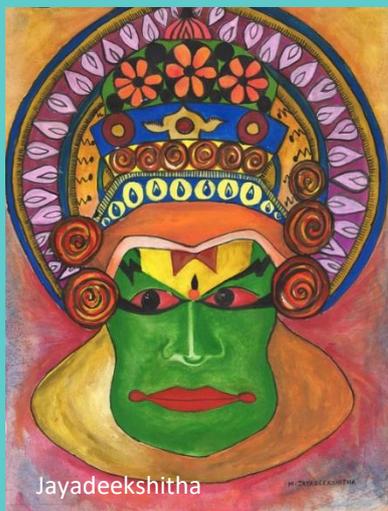
Agrani



Marali



Jayadeekshitha, Mukesh and Vindhya



Jayadeekshitha

ART GALLERY

A Picture is a Poem without Words

- Horace

Raj Jain

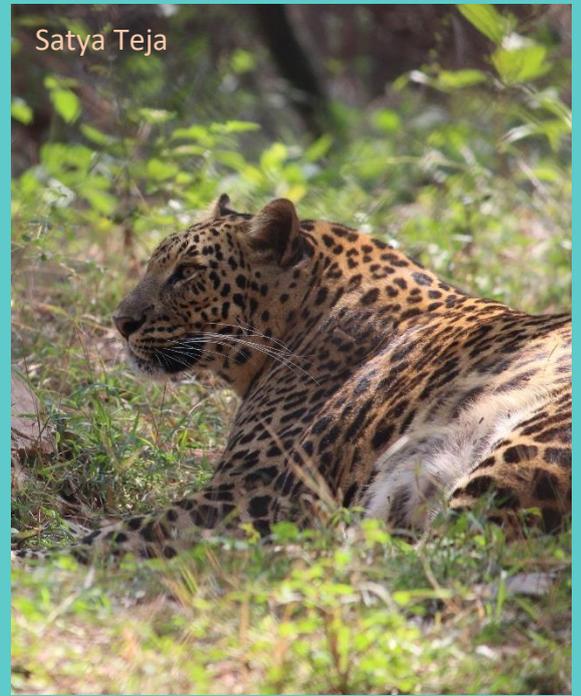


Reshma





Karthik



Satya Teja



Ashish

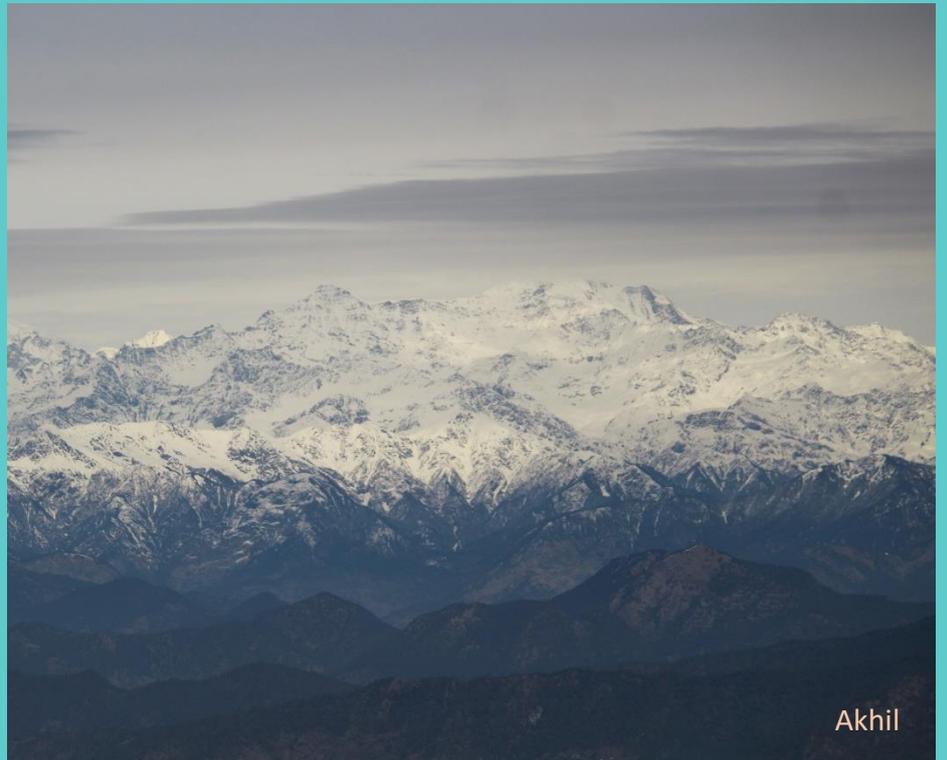
PHOTO GALLERY

Photography is the Beauty of Life captured

- Tara Chisholm



Satya Teja



Akhil

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