SOT MIRROR

SOT NEWSLETTER

PANDIT DEENDAYAL PETROLEUM UNIVERSITY RAISAN

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IEP: Brand Experience

INDUSTRIAL TRAINING

CSSI: A Review

INDUSTRIAL ORIENTATION

NOTE FROM THE EDITORIAL TEAM

DEAR READERS

We hereby present the Autumn Semester Issue of SOT Mirror. This newsletter has been a result of the dedication and hard work of the students and faculty alike. The issue highlights on the summer internship undergone by our SOT students.

We hope that our passion is reflected in the following pages; and wish to supplement this issue with many more like it. Now, without further ado, we would request you to immerse yourself in the world of NEWS that follows.

Happy Reading!!

EDITORIAL TEAM

SOT MIRROR TEAM

Coordinators

SWASTIKA SINHA
NEEL PADODARA
SHUBHRA SINGH
PAULAMI PATRA
JUNER KUKREJA

Design team

AKSHATHA JOYIS
JAY MEHTA
NEEL THAKKER

DIRECTOR GENERAL'S MESSAGE-

I commend all the members involved in the development of the first issue of SOT Mirror. This publication has successfully portrayed the maturity of the youngest school at Pandit Deendayal Petroleum University introduced in 2010.

Today, PDPU is widely recognized as a Centre for excellence in education in the domains of engineering, management, humanities, solar and nuclear energy systems and lays more focus on quality research across all the pro-grams. In the academic endeavor, the University helps to expand the opportunities for stu-dents and professionals to develop intellectual knowledge-base with leadership skills which enables them to compete in the global arena. This goal is accomplished through a number of specialized and well planned under graduate, post graduate, doctoral and executive education programs.

PDPU believes in creating a pristine environment blended with modern technologies to en-hance the spirit and energy level of learners and inspire them to optimize their learning ef-forts.

The newsletter offers the perfect pedestal for the young and creative minds in SOT to bring forth their innovative ideas and to display their achievements. I hope this initiative is carried into the future with passion and I wish the best of luck to all those involved with it.

- Dr. P. K. Banik

From the director's desk

It gives me immense pleasure to pen a few words as prologue to our in-house college News Letter 'SOT Mirror'. It has covered all the events which took place in last two months. Students are now sensitized that they should acquire hands-on-skills which will augment academic skills and improve their chance for placement. The college is committed to foster in its students the pursuit of individual excellence and participation in the full range of academic, spiritual, cultural, social and physical activities, to make them evolve as all-rounders. Real exposure to industries helped students to learn practical aspects of their curriculum and I congratulate the faculties and students for making it possible. College Education is the foundation for all future possibilities in the life of a student. It is from here that one chooses the future line of studies and subsequently one's career.

Therefore, it is important that one gets thorough grounding in academics as well as moral strength to manage one's life.

-DR. H.B Rahgavendra

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Volunteering is a form of civic responsibility, which involves giving of time or labor without the expectation of compensation in any form. Many people volunteer through NGOs in several ways. Volunteering allows students the opportunity to share their skills and talents as well as to learn new skills while helping those in need of assistance.

Civic responsibility can include participation in government, volunteers and memberships of voluntary associations.

Students at the end of 1st year of their Engineering course undergo Civic and Social Service Internship where they are trained to plan and execute an extensive range of social services, social welfare activities, and work in health and philanthropic organizations.

Some of the NGOs where students lent their helping hands are as follows:-

- Visamo Kids Foundation-Ahmedabad
- Bharat Gram Vikas Mandal-Rajkot
- Fringe Habitat India-Delhi
- Blind Welfare Council-Vadodara
- Lion's Club International-Kalol
- Disable Welfare Trust Of India-Surat
- Parvarish-Gwalior
- Mansi Vikas Mandal-Bharuch
- Indiabulls Power Ltd.-Maharashtra

CIVIC AND SOCIAL SERVICE INTERNSHIP(CSSI)
An Experience

UNDERSTANDING THE COUNTRY

-Srijan Gupta(13BCH009)|India Bulls Power Ltd., Amravati]

Understanding and analysing the development of India takes it to its roots, which all begins from the rural section of the country. So for a better understanding about the peninsular nation, it's important to have the knowledge of the rural part.

I had undergone CSSI (civic and social service Internship) at Indiabulls Foundation.

I worked under Mr. Kiran Kadam, Manager, Indiabulls Foundation. I've been the part of Jan Swasthya Rojagar Yojana, which consisted of a mobile ambulance visiting the distant villages and provide them with free medical aid and medicines. The Internship at Indiabulls Foundation has been a reservoir of knowledge and learning. Due to my strong interest in the organization and my desire to learn more about rural health vectors, I worked for 28 days. The aim of my internship was to efficiently observe, learn and understand each and everything about the techniques and processes involved in providing a better and healthier life for the rural sections.

I always had an apathetic attitude towards the rural India, but the Internship has helped me cope up with the feeling and mix up with these people.

CIVIC AND SOCIAL SERVICE INTERNSHIP(CSSI)
An Experience

Seeing the place has completely changed my way of thinking and way of approach to this section of the society. They would play an integral role in my decision making. I also learned how to handle unfamiliar diseases and got aware with the types of problems they face, which became a unique experience.

During the Internship, more than 60 patients were detected with serious medical emergencies and all of them had been provided with the best medical help. Many children suffering from typhoid like symptoms are showing signs of recovery but it will take them two months to achieve optimum fitness. During the Internship tenure, I have seen more than 1,000 rural patients being treated by three different doctors at 16 different villages.

At the end of the Internship, I did realise the importance of this section of the society, and their importance to our mother nation.

INDUSTRIAL ORIENTATION REPORT

IMPORTANCE OF INDUSTRIAL ORIENTATION

"I hear and I forget. I see and I remember. I do and I understand." – Confucius

The industry exposure enhances the undergraduate's work life through added enthusiasm and commitment; provides a lifelong learning experience; it is an opportunity to engage with the profession to which they aspire in a realistic work environment; appreciate and understand the practical application of their academic program; work with professional mentors and to begin to build net-works within their profession.

KEY LEARNING

- **It was privilege to get a chance to understand the most important and inevitable qualities or skills that have made these industries a huge success:**
- **Facing all the turbulences with a positive outlook.**
- **Always be ready to handle any unexpected situations.**
- **Adapt new technology to compete with other industries in market.**
- **Do appropriate time management for production and sales cycles.**
- **Maintain good business relations with market and always keep in touch.**

Utilize maximum technology with minimum cost.

J.K LAKSHMI CEMENT ,KALOL

We students were taken to the conference room where a lecture was imparted which consisted of:-

1) Vision, mission & history of JK Lakshmi cement group
2) Process of cement making
3) Detailed information regarding its grinding unit

INDUSTRIAL ORIENTATION REPORT

It was then followed by a visit of its grinding unit. We were taken to the bottom section of 35m huge silos which stores about 4000 tons of cement. Then next section was the packing unit and after that we were taken to DCS unit from were the entire plant is operated. We were also shown 3 labs namely- shift testing, chemical & physical lab were standard testing of cement [product] is been carried out.

We were then depicted a sewage plant which treats about 6000 litre/day of water used for plantation. The project cost about Rs. 6, 48,255.

The plant has attained various certificates for safety, environment, and energy and quality management. It is awarded for least CO_2 emission.

GRINDING UNIT-J.K LAKSHMI CEMENT

INDUSTRIAL ORIENTATION REPORT

INDIAN FARMER'S FERTILIZER COOPERATIVE LTD. (IFFCO) KALOL

We were taken to DCS unit which controls Urea and Ammonia production.
We were explained the entire plant on the desktop screen itself.
Though it was a very small session yet it was very effective.
Then we were shown a conveyor belt which was carrying the product to a height after neem coating.

Name of basic technology employed

AMMONIA PLANT	MTPD	1100	M/S M. W. KELLOGG, USA
UREA PLANT	MTPD	1650	M/S STAMICARBON BV, The Netherlands

Production

Ammonia - 0.36 million TPA ; Urea - 0.55 million TPA

ESSAR STEEL,HAZIRA

Essar Steel Hazira, Gujarat, houses fully integrated world-class steel facility and is one of the most well-planned, sophisticated and environment-friendly steel complexes. Essar Steel Hazira complex is India's largest single-location flat steel plant, with a capacity of 10million tonn/annum.

Dawn to Dusk (VISIT)

We reached Hazira before dawn and hence spend a pleasing hour at the seaside. Then after having breakfast we tacked together in the main auditorium where lectures on "PLANT SAFETY" & "INTRODUCTION TO HAZIRA STEEL PLANT" were conducted.

INDUSTRIAL ORIENTATION REPORT

After the theory sessions, we were taken to the HAZIRA Port & Hot Roll Plant facility were we studied Blast Furnace method.

At the port a small lecture on Port facilities and working of ports was conducted. We studied the working of Bulk Cargo facilities, Unit Cargo facilities, tide and their uses, draft of ships and other technical terms.

In the Utility section we saw the waste water treatment facility which had a reservoir capacity of 360000 m^3 and where waste water was chemically treated (using coagulation & flocculation methods) and recycled.

Post lunch there were sessions on ESSAR Company's mission and vision, business areas followed by a small movie on Shanghai city emerging infrastructure.

The visit was ended by a concluding session and group photos and by the dusk we boarded the bus for Ahmedabad.

CLUSTER PHOTO OF OUR GROUP

~JAY MEHTA,5TH SEM,CHEMICAL

INDUSTRIAL TRAINING
A Lifetime Of An Experience

The students of the 6th SEM of Chemical had undergone Industrial Training for 6-8 weeks, based on industry of their choice or had undergone training via college.

The industries where students had done their internship are namely:

- KRIBHCO LTD.
- OIL AND NATURAL GAS CORPORATION, HAZIRA & AHMEDABAD
- INDIAN OIL CORPORATION LTD,VADODARA
- GUJARAT ALKALIES AND CHEMICALS LTD.,VADODARA
- ATUL LTD,AHMEDABAD
- RELIANCE INDUSTRIES, LTD
- ESSAR OIL LTD.
- HINDUSTAN MITTAL ENERGY LIMITED
- IFFCO,KALOL
- HINDALCO INDUSTRIES

Here is an account of two students on their Industrial Training

Amee Patel|Indian Farmer Fertilizer Corporation of India Limited,Kalol

(IFFCO) was established on 3rd November 1967 as a multiunit cooperatives organization of board objectives of augmenting fertilizer production, ensuring fertilizer availability at farmers door step, strengthening cooperatives fertilizer production distribution which have resulted in IFFCO becoming one of the largest producer and marketer of Chemical fertilisers.

IFFCO commissioned an ammonia-urea complex at Kalol and NPK/DAP plant at Kandla in 1975. An ammonia-urea complex was set up at Phulpur, Uttar Pradesh in 1981 and at Aonla in 1988. IFFCO is federation of about 36144 co-operative societies.

I am overwhelmed having been given an opportunity to pursue my Industrial Internship from a highly dignified company like IFFCO.

INDUSTRIAL TRAINING
A Lifetime Of An Experience

At IFFCO, I have undergone vocational industrial training at the end of 6th semester for a period of 6 weeks starting from 15th May to 25th June, 2014. As per the schedule allotted to me by Mr. Suresh Trivedi, Manager of Training Department, IFFCO, I had spent a couple of days working in the Fire and Safety Department, Ammonia Synthesis section, Urea Synthesis Section, Utility and Offsites Department and the laboratory.

IFFCO Kalol plant consists of 1100 tpd ammonia plant, 1780 tpd urea plant and associated offsite / utility facilities. Ammonia plant is designed and engineered by M/s. M.W. Kellogg, USA.

Carbon dioxide removal section in ammonia plant is highly energy intensive. Many developments have been made to make it more energy efficient and environmental friendly. a-MDEA process for CO2 removal is one of the best available process to meet the specific plant conditions of high CO2 purity, minimum H2 loss, no corrosion, low energy requirement and low capital investment.

At IFFCO Kalol MEA CO2 removal process was revamped to direct solution swap of a-MDEA process. Revamping of CO2 removal section was part of upgrading the plant capacity for higher production. A-MDEA process have increased the CO2 absorption capacity and reduced the energy requirement with no capital cost

Utility plant consists of

1. DM Water Plant,
2. Inert Gas generation plant and compressors
3. Cooling Towers
4. Steam Generation plant

Offsite plants consists of

1.Ammonia and Naphtha storage plants. (Naphtha was no longer used as a raw material due to environmental and economic issues)

2.Narmada Raw water treatment plant

3.Effluent treatment Plant

We saw the bagging and material handling plant of Urea which was an altogether different unit. The laboratories housed state of the art equipments.

INDUSTRIAL TRAINING
A Lifetime Of An Experience

AKSHATHA JOYIS|INDIAN OIL CORPORATION LTD. VADODARA

The Gujarat Refinery at Koyali in Western India is Indian Oil's Second largest refinery. The refinery was commissioned in 1965-1966. Its facilities include five atmospheric crude distillation units. The major units include CRU, FCCU and the first Hydrocracking unit of the country.

Gujarat Refinery, operating with an installed crude processing capacity of 13.7 million metric tonnes per annum, processes indigenous and imported, both low sulphur and high sulphur grades of crude oil. The product slate includes besides fuels, petrochemical products such as Linear Alkyl Benzene (LAB), Polypropylene Feed Stock, Food & Polymer Grade Hexane.

Gujarat Refinery is implementing a mega project worth around Rs.7000 crore to comply with the road map for supplying eco-friendly Bharat Stage-III and IV compliant MS and HSD

The Refinery has invested about 40% of the project cost for producing eco-friendly products to take care of environment at the consumer's end. Quality Improvement units like Diesel Hydrotreater, Sulphur Recovery Plant with 99.9% conversion alongwith state-of-art Sulphur Pelletisation Unit and Hydrogen Unit have already been commissioned. The Refinery has already started dispatching both BS-III and -IV compliant products to the market. The project related to the upgradation of the bottom of the barrel is at an advance stage of construction / commissioning.

It is Gujarat Refinery's sustained endeavour to conserve energy by adopting well hydrogen recovery and management system, recovery of heat from residual heat of hot streams, selecting high efficiency and latest technology / equipment and minimising the specific energy consumption through reduction of fuel & loss. The specific energy consumption expressed in terms of MBN (Thousand British Thermal Units / Barrel / Energy Factor) has come down from 100 to 64 within a span of 15 years. Efforts are on to achieve the industry benchmark level.

INDUSTRIAL TRAINING
A Lifetime Of An Experience

Gujarat Refinery has two fire stations with fire fighting network spreading all over the refinery with monitors, hydrants and remote operated monitors.

As a part of my 6 weeks internship at IOCL,I had learnt about how an organization functions(IOCL). I learnt about how to utilise products judiciously ,in order to conserve energy. The main products of IOCL are the products obtained by fractional distillation of crude oil.

During the internship I had learnt about the various towers and columns like distillation columns, fractionators coking units and about various types of trays, pumps employed and storage units and their specific applications.

By products were Naphtha, used to treat petrol, diesel to increase their marketable value and quality, petroleum jelly, Vaseline etc.

The Biggest units at IOCL were hydro treating and sulphur removal unit.

Also we learnt about operations of DCS system, rocket fuel production which was a whole new experience.

I had taken up a project on Diesel hydrogen treating (DHDT) there and had derived and calculated its overall material balance.

Altogether my stint at IOCL was very overwhelming and informative .I had a fun-learning experience there.

CIVIC AND SOCIAL SERVICE INTERNSHIP(CSSI)
A Review

Some of the NGOs where first year electrical engineering students had undergone their internship for 3 weeks are as follows:

- Society For Village Development in Petrochemical Area (SWADES), Vadodara
- Nirman Trust
- Madhusudhan Education Trust,Rajkot
- Indian Red Cross Society,Bharuch
- Rural Development and Research Centre,Ahmedabad
- The Young Citizen Of India Charitable Trust,Mehsana
- Shri Mahila Seva Sahakari Bank,Ahmedabad
- Bhabha Institute of Social Service,Bihar

EXPERIENCES

RUTUL MEHTA*(13BEE051) | *Shree Madhusudan Education Trust ,Rajkot

I had done my internship in Shree Madhusudan Education Trust (Rajkot, Gujarat). The duration of this internship was 21 days starting from 20th May till 9th June. During this span we visited many slum areas, slum school, Orphanages, mental asylum and many other such places. We did several surveys, collecting various useful data about the children of slum regarding their health, education, etc. My personal experience was good watching NGOs officers working for society, betterment of the poor people and for the country. Also, I was privileged to get the opportunity to work with them for such a noble cause.

NIRAVKUMAR ARVINDBHAI PATEL(13BEE078)|Internship at Egypt

I had been to EGYPT in last summers. 6 weeks, totally new culture, new people, new environment, new country, everything was new for me and can be named as cultural shock to me. I met people from different countries such as KENYA, CANADA, UKRAIN, TURKEY, SINGAPORE, AUSTRALIA, CHINA, MAXICO, BRAZIL etc. Worked with NGO name RESALA which was the biggest NGO in EGYPT. My work was to teach deaf and dumb children and I did my work patiently. Apart from this, I also worked with RECYCLING part which was also one part of RESALA. I liked my work and enjoyed a lot. Also visited beautiful places in EGYPT such as PYRAMIDS, CAIRO MUSIUM, CITADEL, RED SEA, DAHAD, ALEXANDRIA etc. From foreign interns I learnt many languages like Spanish, Chinese, Arabic.

I would like to thank u PDPU and AIESEC to give me an opportunity.

INDUSTRIAL VISIT AND INDUSTRIAL TRAINING
A Lifetime Of an Experience

2nd Year students of Electrical Engineering Department were taken for industrial visits as a part of their industrial Orientation Program in June 2014.

- Sardar Sarovar Hydro Power Plant, Narmada
- Electronics Quality Development Centre, Gandhinagar
- Thermal Power Station, Gandhinagar
- Transformers and Rectifier's India Limited ,Sanand

On the other hand the students of the 3rd year of Electrical Engineering had undergone Industrial Training for 6-8 weeks, based on industry of their choice or had undergone training via college.

The industries where students had done their internship are namely:

- Gujarat State Electricity Corporation Limited.
- Gujarat Energy Transmission Corporation Limited
- Gujarat Thermal Power Station,
- Tata Motors
- SIEMENS ltd,
- Essar Services Ltd
- NBE Motors
- Larsen & Toubro Limited
- Bharat Heavy Electricals Ltd.
- Nuclear Power Corporation Of India

Here is an account of a student on their Industrial Training

ANISHA GOEL| GUJARAT THERMAL POWER STATION,SUZLON ENERGY LTD,AHMEDABAD

As a part of the summer internship, I did training in Gujarat Thermal Power Station (GTPS), Gandhinagar for 21 days and Suzlon Energy Limited, Ahmedabad for 24 days. In GTPS, I learnt about the working of boilers, turbine and generators. I also saw the working of transformers and its auxiliaries, motors, busbars and the switchyard consisting of different relays and switch gears. I realised that what we learn theoretically is different from what exists in an actual plant.

INDUSTRIAL TRAINING
A Lifetime Of an Experience

Many of my basic concepts were cleared and whatever I have learnt upto 7th semester was covered. I also learnt about the interconnection of grids in many areas of Gujarat and how each and every household gets a stable supply of electricity. This further improved our practical knowledge which we will actually use in the field in the future.

In Suzlon Energy Limited, I learnt the generation and transmission of wind power. I realized the importance and need of renewable energy resources for sustainable development and why wind energy is the fastest growing energy in the world. I learnt about the planning and construction of wind farms, the parts of windmills and the wind energy generators. I visited the Blades Manufacturing Plant in Vadodara where I learnt how different sizes and shapes of blades can improve the efficiency of wind energy and how the wind power grid integration takes place. This was a great experience as wind energy is growing at a tremendous rate and still a lot of research is going on and how little we know about it.

All in all, the Industrial Training helped me to get acclimatized to the working environment and compare my theoretical knowledge with the practical applications.

CIVIC AND SOCIAL SERVICE INTERNSHIP(CSSI)
A Review

Some of the NGOs where first year electrical engineering students had undergone their internship for 3 weeks are as follows:

- Shamabharti Khadigram
- Ambuja Cement Foundation
- Lok Vikas Samiti
- Shri Jagrut Nagrik Grahak Suraksha Mandal
- Mavjat Training Centre For Mentally Handicapped
- Gujarat Labour and Research Services Institute
- Special Olympics
- H.N Safal Foundation

CIVIC AND SOCIAL SERVICE INTERNSHIP(CSSI)
A Review

SAVAN VORA|THALASSEMICS GUJARAT,

I did my CSSI at the NGO named 'THALASSEMICS GUJARAT', which works with Thalassemia-Major patients. At the starting of the internship I gained a lot from the internship. In their 'World Thalassemia Day' event more than 800 patients came in, and we were given the responsibility of organizing a Blood Donation Camp. We could collect 78 units of blood, and the day will be etched in my memory forever! The civic internship gave me so much! I also met our Honourable Chief Minister Smt. Anandiben Patel. I feel blessed to have had a chance to give back to the society!

SAVAN WITH THE THALESSIAMIC PATIENTS

-NEEL SHAH| SAHAJ,DAHOD

I did my CSSI Internship at "SAHAJ", which is an NGO that works for the women of tribal areas around Dahod. What started as a group of 8 women, is now a 4000 women organization. During the internship I was given the task of conducting a demographic survey of 5 villages, where SAHAJ wasn't working. (Dhadhela, Dhabda, Khirkai, Goria and Mangal Mahudi). The internship gave a me a chance to be able to look beyond my comfort and into the difficulties of life. I wish I get a chance someday again to contribute more to the society!

INDUSTRIAL ORIENTATION REPORT

The industrial orientation organized by PDPU consisted of series of expert lectures for the first three days. Three lectures were arranged on the first day (18th june). The speaker for the first lecture was Ms. Sulatha Shetty. She enlightened the students about the scope of education in foreign countries. The voice of the second lecture was Mr. Vikas Pansari, a member of iscon committee. He explained the students the importance of inculcating good habits. The speaker for the third lecture was Mr. Parasharan Chari. It was a career counselling session in which the students were informed of the options available after graduation. On 19th june, one lecture on "infrastructure projects in India", voiced by Mr. Rajnikant Patel, was arranged for 5th semester civil engineering students. On 20th June, Mr. Sagar Deshmukh of Lea Associates of south asia Pvt. Ltd., imparted a detailed knowledge of project development, and also enlightened the students about the kalpsar project of Gujarat.

Industrial visits

GIFT CITY

This visit was coordinated by Mrs. Niragi Dave. Students were given information about GIFT as financial hub of India and detail construction, master plan and current status of progress, financial importance, engineering marvel, solid waste management, direct cooling system, utility trench system and water supply and sewerage system. It is first of its kind in India to get IFSC status from were all international transactions can be managed.

INDUSTRIAL ORIENTATION REPORT

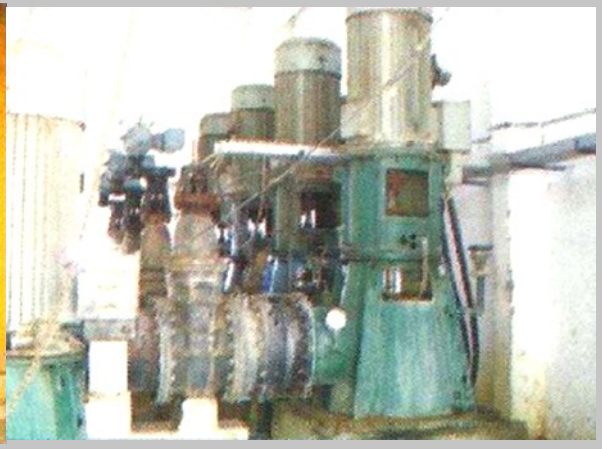
River front

The visit at riverfront was coordinated by Mr. Naimish Bhatt. There the students were guided by an AMC engineer. Various areas of the riverfront like, thought garden, sun-dial, lotus pond, children's play area, amphitheatre, stepwell, etc. were shown to the students. The engineer explained the technical intricate details of the riverfront like the purposes and dimensions of diaphragm wall, anchor slab, retaining wall etc. The plan and development of riverfront was also explained to the student.

INDUSTRIAL ORIENTATION REPORT

Kotarpur water treatment plant

The visit was coordinated by Mr. Akshay Jain. The students were given information about the capacity of the plant and the various process involved in the treatment process. The students were shown various chambers of the plant like the inlet bay, alum dosing tank, distribution tank, filter house, chlorination tank etc. the students were explained, in detail, the cleaning of water in each chamber. the students were also shown the plan and layouts of the whole plant.



INDUSTRIAL ORIENTATION REPORT

IRB(NH 8)

The visit to NH 8 was coordinated by Mr. Rajesh Gujjar. Road construction was been carried out by the IRB infrastructure developers Ltd., on NH 8, at the time of visit. Students understood the working of machines like sensing pavers etc. in addition to this, the students were explained the procedure of laying a road, the different materials used, dimensions etc., by the engineers on the site. Then the students were also shown the construction of flyover on NH 8 as well as a Hot Mix Plant.

INDUSTRIAL TRAINING
A Lifetime Of Experience

The students of the 6th SEM of Civil Engineering had undergone Industrial Training for 6-8 weeks, based on industry of their choice or had undergone training via college.

- Krunal Infrastructure
- Spin Systems Pvt Ltd
- ICCPL
- J.P Infrastructure
- Western Railways
- L&T Baroda
- Adani Shantigram
- IRB Nadiad
- Gift City,Gandhinagar
- Gail India Ltd.
- Ajay Engineering Pvt Ltd.

INDUSTRIAL TRAINING
A Lifetime Of Experience

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INDUSTRIAL TRAINING
A Lifetime Of Experience

EXPERIENCES

SOHAM RAVAL|*IRB INFRASTRUCTURE, NADIAD*

Simply put, an internship is a structured opportunity for us you to learn, grow, and contribute in a professional setting. Our experience at IRB was the same. We learnt a lot about how to apply the theoretical knowledge gained in classrooms to the actual practical on field. This internship was quite helpful in developing a sense of professionalism in us. This was a platform where we met people with similar interest and different ideas. This was also the first ever opportunity where we were given the chance to really contribute to a profession. It was an experience which made us more aware, more skillful, more tactical and more responsible!!

AVI MANIAR| *TATA SPONGE TRON LTD, ORISSA*

My internship was at TATA SPONGE TRON LTD., ORISSA. The duration of internship was 6 weeks. The task that assigned to us was the Repairing of the RCC Chimney. Repairing and Rehabilitation of RCC Structures are the recent trends in CIVIL ENGINEERING. Tata Sponge Iron Ltd. Being a global company, it was worth working there. The new experiences there include working with some intellectual people and arranging according to their style, working in a different atmosphere. Above all, working as an engineer and that too with some responsibility was simply awesome. I have learned a lot and that too being above as such a type of place teaches you many things.

ACHIEVER'S INTERVIEW

MR. KARTIK KAPOOR, SEM- 7, CIVIL ENGINEERING

Mr. Kartik Kapoor from Civil'11 Batch this summer worked as a research Intern at University of Manitoba. UoM is in Winnipeg City of Manitoba province in Canada, established in 1877 it has developed itself as a research intensive Institute in different disciplines of engineering, and we are proud of the fact PDPU has MOU signed with UoM. To know more about the experience read the following…

Q1] Hi Kartik! , How did you land this Internship?

Representatives from UoM came to PDPU and interviewed me, I Guess I fitted well in their requirements so they gave me an invitation letter for internship lately and then I had an online interview by Dr. Nan Wu under whom I was going to work.

Q2] How was the experience of Internship?

Well two months that too in Canada is definitely a learning experience, not just you see the culture there but you even start incorporating it in your attitude and confidence at some time. I liked the infrastructure and organized facilities in city, but the thing that touched me most was the treatment they gave to disable in city transport.

Q3] What did you learn during internship?

My Research topic was piezoelectric flexible pavement. I did simulations to find potential of piezoelectric pavements and than I did analysis to design the piezoelectric harvester. I was oriented to Research methodology and I feel you need a lot of patience for it, I learned Matlab; which was the base software for carrying calculations in this research and the technical writing or I must say what not to do in technical writing.

Q4] Should such internships be encouraged more among SOT students?

Definitely YES, It's a life time opportunity that not only upgrades your CV but gives you a different perspective of engineering at global level and mere words are fewer to describe the experience that you go through.

ACHIEVER'S INTERVIEW

CIVIC AND SOCIAL SERVICE INTERNSHIP(CSSI) A REVIEW

Some of the NGOs where first year mechanical engineering students had undergone their internship for 3 weeks are as follows:

- Indian council of Social Welfare
- CSRL
- Vikas Vatrul Trust
- Manav Kalyan Mandal
- Human Rights Council
- Aadarsh Yuva and Mahila Vikas Sanstha
- Blind People's Association, India
- Pathshala Group
- Rural Development and Research Centre
- Satyam Seva Yuvak Mandal
- Indian Council of Social Welfare

EXPERIENCES

SHUBHAM|INDIAN COUNCIL OF SOCIAL WELFARE,JAIPUR

Over the course in Indian council of Social Welfare, I have acquired the following experiences:

After meeting and observing the handicapped people and old age people, I have learned how they feel in the society. This experience has generated feelings of concern and I am ready to help them whenever required. Now I am able to know how the NGO works in the society for the benefit of the people. Also, I got to know about people's passion, desire and dedication for society and understood that commitment to the cause is so imperative for accomplishment of the task. This realization will surely help me in my life.

After interacting with the handicapped people, old age people and with the patients in medical camp I improved my communication skills which will help in my social life.

CIVIC AND SOCIAL SERVICE INTERNSHIP(CSSI) A REVIEW

VIYAT|VIKAS VATRUL TRUST,

Over the course in Vikas Vartul Trust, I have acquired the following experiences:

- **Now I am able to know how the NGO works in the society for the benefit of the people. Also, I got to know about people's passion, desire and dedication for the society and understood that commitment to the cause is so imperative for accomplishment of the task. This realization will surely help me in my life.**
- **I learnt how to deal with different kind of people.**
- **I learnt how to work in a group and co-operate with all in the group.**

JIWESH PAHWA|CENTRE for SOCIAL RESPONSIBILITY and LEADERSHIP,

I worked for a NGO named CSRL in Delhi region. The NGO gave me the projects of report analysis of the entrance test taken by the NGO in various regions of our country. The report was then combined and presented in front of the government in order to be taken in consideration for further actions of the government in the field of science and technology.

The NGO also arranged my visit to some of the centres located around Delhi NCR region to collect information about the educational facilities available to them in their regions. There I found students from many regions of the nation coming and studying with the NGO for many prosperous colleges of the nation like NITs, IITs etc.

CIVIC AND SOCIAL SERVICE INTERNSHIP(CSSI) A REVIEW

The first task I was allotted was to prepare a report of the grade of the students sitting in entrance exam of the NGO in order to grab a seat for the prosperous super 100 batches for their further studies for the competitive exams .

This work involved the report of 19 different states within which thousands of students sat for the entrance exams. One such report has been presented in front of you at the end of the document.

Secondly I being a student who has completed 1st year of B.Tech I was asked to look into the study patterns of students and prepare them for the challenges of future.

INDUSTRIAL ORIENTATION

Some of the visits organised by PDPU for 2nd year Mechanical Engineering students as a part of Industrial Orientation Program were as follows:

- **Indo-German tool room**
- **Bhagwati Sphero cast,Ahemdabad**
- **Bosch Rexroth, Ahmedabad**

Group-A (Thermal)	Banco Products I Ltd,Vadodara	ABB, Vadodara	Dresser-Rand, Ahmedabad	INger-Sol Rand, Ahmedabad
Group-B (Design)	L&T Hazira, Surat	Elecon Engineering (Gear Unit), V.V.Nagar	ABC bearing , Bharuch OR FAG bearing , Vadodara	BOSCH Rexroth, Ahmedabad
Group-C (Production)	Bhagwati Sphero Cast, Ahmedabad	Gujarat Metal Cast, Ahmedabad	Indo-German tool Room, Ahmedabad	CIPET, Ahmedabad

INDUSTRIAL TRAINING REPORT

EXPERIENCES

CHINTAN PATEL |ALSTOM INDIA LTD.

During these 45 days, I certainly learnt a lot about every aspect of the actual field work that takes place in an industry, right from the working environment to technical details of various machines and processes. This training gave me an insight into working plant, production line and also material management. Relating to my branch I learnt mainly about various machines like Vertical Turning Lathes, Drilling Machines, Welding Process, Principle of generator, Parts of generators, Components of hydro turbines etc.

Alstom also gave me opportunity to visualize the actual assembly of Hydraulic Bearing and hydraulic turbines. Alstom gave me opportunity to understand about fundamentals of hydro generators.

Training workshops for safe practices are conducted at regular intervals for employees at all level of fabrication department. Further protective equipments like safety shoes, helmet, and glasses are compulsory for all who enter the fabrication building.

The things are numerous and words are few. To conclude, I would like to say that even after my full attempt only mouthful of knowledge could be absorbed from the sea. The time was less while there was lot to learn. I hope that I would get another chance to visit and learn the things I have left behind in this company to learn.

INDUSTRIAL TRAINING REPORT

EXPERIENCES

RUCHIK THAKER |WINDSOR MACHINES

As an undergraduate of the Pandit Deendayal Petroleum University, I would like to say that this six week industrial training program is an excellent opportunity for us to get to the ground level and experience the things that we would have never gained through while studying in classrooms. I am grateful to our college and WINDSOR MACHINES LTD. for giving me this wonderful opportunity .The main objective of the industrial training is to provide an opportunity to undergraduates' to identify, observe and practice how engineering is applicable in the real industry. It is not only to get experience on technical practices but also to observe management practices and to interact with fellow workers. It is easy to work with sophisticated machines, but not with people. The only chance that an undergraduate has to have this experience is the industrial training period. I feel I got the maximum out of that experience. Also I learnt the way of work in an organization, the importance of being punctual, the importance of maximum commitment, and the importance of team spirit. In my opinion, I have gained lots of knowledge and experience needed to be successful in a great engineering challenge, as in my opinion, Engineering is after all a Challenge, and not a Job.

INTERNATIONAL EXPOSURE PROGRAMME(IEP) A GRAND EXPERIENCE

CANADIAN LIGHT SOURCE

MOHYILA INSTITUTE, (STUDENT RESIDENCE)

INTERNATIONAL EXPOSURE PROGRAMME(IEP) A GRAND EXPERIENCE

BANFF NATIONAL PARK, ALBERTA

CIVIC AND SOCIAL SERVICE INTERNSHIP(CSSI) A REVIEW

EXPERIENCES

YAMAN PATTANAIK| SAATH

Our working with Saath NGO was captivating and enlivening beyond doubt. The short tenure of 24 days from 15th May till 7th June at Saath inculcated new spirit and approach of thinking in us. The experience to explore the slum dwelling areas and the underprivileged people was quite engaging and worth a consideration. The field visits to slum dwelling areas gave us a philanthropic approach. We came across the problems faced by them and this indeed was a start to our new journey in Saath. All of us were assigned different departments according to our potential. Some of us worked with the Research and Documentation Cell and some worked with the Fund Raising Department. We were also given the opportunity to work with KPMG in order to conduct workshops for the underprivileged kids. Indeed an inspiring and unforgettable experience for each of us who got associated with this respectable NGO!

CIVIC AND SOCIAL SERVICE INTERNSHIP(CSSI) A REVIEW

INDUSTRIAL ORIENTATION AND INDUSTRIAL TRAINING

At the end of 2nd year Industrial Engineering Students were taken for industrial visits as a part of their industrial Orientation Program in June 2014 at the following Industries :-

- KHS Pvt Ltd.
- Electrotherm ,Indus University Campus
- Ferromatic Milacron India Pvt Ltd.
- Bosch Rexroth,Ahmedabad

On the other hand the students of the 3rd year of Electrical Engineering had undergone Industrial Training for 6-8 weeks, based on industry of their choice or had undergone training via college.

The industries where students had done their internship are namely:

- Kalptaru Power Transmission Pvt. Ltd
- Zydus Hospira Oncology Pvt Ltd.
- Cadbury India Ltd.
- Honda
- Essar Steel Pvt Ltd,Hazira
- Hindustan Coca-Cola Beverages Pvt Ltd.
- Cadila Healthcare Pvt.Ltd
- Windsor Machines
- Elecor Engineering Company
- Add Value Lean Consultancy Firm
- Colgate Palmolive

INDUSTRIAL ORIENTATION AND INDUSTRIAL TRAINING

EXPERIENCES

SAMIP KHATRI|ONGC,HAZIRA

The primary aim of my internship at ONGC hazira Surat was the maintenance of pumps and compressors employed at this gas processing plant . Secondary aim included the study of all other machinery in use at the plant : Boilers , Gas Turbines , Heat Exchangers .

Maintenance of pumps and compressors at this plant was the most prominent maintenance activity as pumps and compressors are in constant use . All the various maintenance types were employed . The experience was vital in the sense that as industrial engineers who are more often employed in a managerial or design role need to understand the ground level working of the plant and the difficulties faced while maintenance activities.

Computer software SAP was the most important tool involved with the scheduling and processing of all the maintenance activities .

As well as keeping a record of all the steps taken during the maintenance.

REPORT ON THE THIRD ASQ WORKSHOP

On August 3rd, 2014, PDPU's ASQ student chapter organized the third workshop on "Statistical Process Control". We had esteemed speaker, Mr. Abhishek Dixit who conducted this particular module. Mr. Abhishek Dixit is the Manager, Quality Department at Ford India Pvt. Ltd.

In the third module, we covered the basic tools used for Statistical Process Control. As a practical exercise, the class was divided into several groups and told to prepare presentation covering all the major topics of SPC. The topics covered in the workshop were Basics Of Statistics, SPC benefits and its requirement, Concept of Variation, Basics Of Quality, Process Capability Index, Methods of implementing SPC and its results, Control Charts, etc. The practical applications of these tools and the imparted knowledge of the implications of these tools in industries as well as daily life were also

covered.

Industrial 2011-2015 batch is looking forward to many such interesting sessions in the coming weeks.

REPORT ON THE THIRD ASQ WORKSHOP

OUR TROUPE

CIVIL ENGINEERING DEPARTMENT

- NEEL SHAH
- ASHISH CHAURASIA
- SHEFALI GAHRANA

INDUSTRIAL ENGINEERING DEPARTMENT

- HIREN PATEL
- RAHUL BAKRANIA
- SHIVANI
- SHIVAM

ELECTRICAL ENGINEERING DEPARTMENT

- SHIVAM GUPTA
- VASUDHA
- RAVI PATEL

MECHANICAL ENGINEERING DEPARTMENT

- CHANDNI BHUVA
- JIVESH PAHWA
- KAWAN JAIN

CHEMICAL ENGINEERING DEPARTMENT

- AKSHATHA JOYIS
- JAY MEHTA
- NEEL THAKKAR

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