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& GRAMOTHAN

THE SKIT TIMES

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VISION

To promote quality education, training and research in the field of engineering by establishing effective interface with industry and to encourage faculty to undertake industry sponsored projects for students.

MISSION

To promote higher learning in advanced technology and industrial research to make our country a global player.

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OUR MENTOR & PATH FINDER



Swami Keshvanand Ji
(1883 - 1972)

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Dear Readers

Indians are profoundly religious people. Their goal of life is self-realization or the attainment of God-consciousness. A religion of some kind they must have, a religion which will stir the depths of the heart and give room for the exercise of faith, devotion and love. All festivals have a deep spiritual import or high religious significance. They have religious, social and hygienic elements in them. Indian culture is incredibly complex; but beneath this seeming chaos is a scientific foundation that is thousands of years old. Today, yogis and mystics explain the importance of festivals in Indian culture, and how celebration can be a passageway to the most profound aspects of life. In India, festivals do not just offer people a temporary reprieve from their daily grind; imbued with deep inner significance, each festival is a multifaceted celebration.

Today no single achievement satisfies man or society. Man constantly strives to accomplish more things in less time. Today men seem to revel in dissatisfaction. The preparedness to sacrifice everything for achieving a noble objective is hardly present among the young. Success in life consists in recognizing the truth of one's being. But the youth today do not make any effort to find the Truth that is the Eternal Reality. They are prepared to go through any amount of trouble to acquire knowledge that is related to the physical and the transient. They do not make the slightest effort to comprehend the Divine that is all-pervading, that will confer enduring bliss and make one's life meaningful and worthwhile. Festivals in India have been designed to promote awareness of this truth. Their inner significance, as well as their scientific basis, has to be understood. We will be able to protect our identity and culture with the same spirit. Let us join hands and take a pledge that we will inculcate these values in our coming generation, counsel them to be aware of the importance of festivals so as to acquire and imbibe the truth in all walks of life. Wish all our readers a happy and safe Diwali.

Happy Reading

Dr. Niraja Saraswat
Editor-in-Chief

ORIENTATION OF B. TECH. I YEAR STUDENTS

On 4 August, 2014, the SKIT family organised an orientation programme to welcome the 1st year students. It began with the lighting of lamp and a melodious song to invoke the blessings of the Almighty. This was followed by the floral welcome of the esteemed chief guest, Prof. A. P. Singh.

Shri Surja Ram Meel, Chairman of SKIT delivered the welcome address in which he expounded on the value of a disciplined life and exhorted the students to utilize the four years at college to the utmost and flower out as creative and good humans. He also extended a warm welcome to the parents, asked them to be vigilant about their child and assured them that SKIT will leave no stone unturned to shape their child's future. Mr. Jaipal Meel, Director SKIT, briefed the students and their parents about SKIT. He apprised the students of the facilities provided at SKIT and the functioning of the various clubs and forums so that they excelled and became all rounders.

Prof. (Dr) S.L Surana, Director (Academics) shared the vision and mission of SKIT with the new students. He delineated the principles of discipline and regularity as the key rules of SKIT. He encouraged the students to work with complete

devotion during these four years, not only in studies but also in extra co-curricular activities. Prof. A. P. Singh Chief Guest, Vice Chancellor, Central University of Rajasthan, addressed the gathering by first congratulating the parents and students on becoming a part of the SKIT family. He explained the importance of evaluation, innovation, education and discipline in life. He laid emphasis on honesty, integrity and hard work to be successful in life. According to him, there is 99% perspiration and only 1% inspiration behind a successful life. Dr. S.K. Calla, Principal SKIT proposed a vote of thanks.

The second half of the session began with cultural performances and a mesmerizing group song. Then Prof. Anil Mehta of the University of Rajasthan enlightened the students with his motivating speech on positive appearance, happiness, opportunities and gratitude. He urged the students to engage wholeheartedly in whatever task they performed so that they never failed. He laced his speech with stories and anecdotes, and motivated the students to strive hard for the goal. With his exhilarating speech the ceremony came to an end.

of time and urged the students to be wise in its management.

Dr. S. K. Calla, Principal, SKIT, underlined the various problems facing India and spurred the students to find their solutions. Certificates and cash awards were conferred on faculty members who had brought out quality research work. The recipients included, Prof. Rohit Mukherjee (Dept. of Mathematics), Prof. Amber Shrivastava (Dept. of Mathematics), Dr. Niraja Saraswat (Reader, Dept. of English), Dr. Lalit Gehlot (Sr. Lecturer, Dept. of English), Mr. Jaiprakash Vijay (Sr. Lecturer, Dept. of ECE), Mr. Vipin Jain (Sr. Lecturer, Dept. of CS), Dr. Sangeeta Gupta (Reader, Dept. of Mathematics), Dr. Komal Sharma, (Reader, Dept. of Physics), Mr. Naval Kishore Jangid (Sr. Lecturer, Dept. of Mathematics), Ms. Rukhsar Zafar (Sr. Lecturer, Dept. of ECE), Mr. Ashish Nayyar (Reader, Dept. of ME), Mr. Chanadan Kumar (Lecturer, Dept. of ME), Mr. Ved Prakash (Lecturer, Dept. of ME). Students with achievement in sports were also awarded on the same occasion. The institute also honoured Mr. Hazari for his dedicated services.

Prof. (Dr.) N. K. Banthiya, Head, Dept. of ME, SKIT talked about the many sacrifices of the freedom fighters. He wished that every Indian should rise above social evils. The celebration culminated in a cultural programme put up by students which included a play on the theme of the Zaliyawala Bagh massacre, poetry recitation and musical performances.

The programme ended with distribution of sweets to all.



INDEPENDENCE DAY CELEBRATION

The institute celebrated the Independence Day in an atmosphere of patriotism and veneration for the freedom fighters. The celebration began with tricolour hoisting by Chief Guest, Mr. Raja Ram Meel, Chief Patron of the institute who extended his greetings to the audience and reminded it of the sacrifices of freedom fighters. He exhorted the young engineers to imbibe moral values and understand the importance of a good character.

Prof. S. L. Surana, Director (Academics) laid stress on the importance of introspection. He also emphasized the importance of good reference books and asked the students to consult them. He called attention to the worth

PROF. SUBRAMANIAN'S DISCOURSE



At SKIT Prof. K. Subramanian gave an inspirational and sound message to the final year students on 23 August. Prof. K. Subramanian is ex-senior deputy director general at National Informatics Center, Ministry of Communications & Information Technology, New Delhi & also honorary Information Technology Advisor to Comptroller & Auditor General (CAG) of India. He has more than three decades of experience in ICT introduction, design, development, implementation & audit of technology & systems, a pioneer in introducing technology in banking.

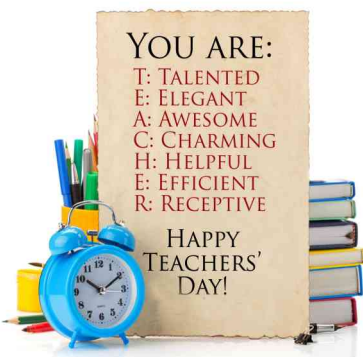
He is currently working on ICT education and management.

Prof K Subramanian has been a fellow of IETE, National Telematics Forum, India Science Association and Indian Institute of Standards Engineers, Association of computing machinery ACM (USA), Association of certified Fraud Examiners (ACFE,USA). In his lecture he talked about the relationship between information technology and economy. He enthused the budding engineers with the live examples of Bill Gates and The Internet. His speech was not only pro to technology but also laid stress on the ideas that are social as well as commercial.

His concept of innovation from the very roots was very moving. Then he talked about the cyber security and its dealings in day-to-day world. He with his best ways established the thoughts, made the students aware about the various aspects of security. Prof. Subramanian covered each and every aspect of security issues in this world and especially in our country. He also discussed innovation, productivity, knowledge management and Digital Future. Ms. Nidhi Jain, Lecturer coordinated the programme.

FELICITATION ON TEACHERS'DAY

Lions International Club organised a felicitation function on Teacher's Day at Hotel Clarks Amer on 6 September 2014. Prof. (Dr.) S.L. Surana, Director (Academics) was honoured for his contribution in the spread of quality technical education by their District Governor Mr. Sumer Jain, Mr. Kalicharan Saraf, Education Minister, Government of Rajasthan was the chief guest of the function. We feel highly privileged to work under the guidance of Prof. (Dr.) S.L. Surana. A felicitation programme was also organized to commemorate the birthday of former president and renowned academician Dr. Radhakrishnan. State Bank of India honoured two faculty members from SKIT, Prof. Ramesh Pachar, Vice principal and Head, Dept. of EE and Dr. Vinita Sharma, Reader, Dept. of Chemistry. They were conferred the title of 'Best Teacher' for their significant contribution in teaching and other pursuits. The Editorial Board conveys its heartiest congratulations to the recipients of the honour.



BLOOD DONATION CAMP 2014

Students of SKIT always make sincere efforts to serve the society. Continuing the practice, a voluntary blood donation camp was organized for another consecutive year on 27 September 2014 in collaboration with Youth Red Cross Club, Lions Club, SMS Hospital blood Bank, Santokba Durlabhji Memorial Hospital, and Swathya Kalyan Blood Bank, Jaipur.

Present at the inaugural ceremony were Dr. Lalit Mehra, Chairman & MD, Rajasthan Warehousing Corporation as the chief guest and Dr. S. S. Agarwal, Chairman, Swathya Kalyan Goup of Institutions as the guest of honour. Mr. S. R. Meel, Chairman, SKIT, Mr. Jaipal Meel, Director, SKIT, Prof. S. L. Surana, Director (Academics), Prof. S. K. Calla, Director (Development and Welfare) were also present on the dais.

The programme began with a welcome speech by chairman S.R.Meel. He greeted the guests and lauded the students for putting in voluntary social service in the medical field. He threw light on the importance of blood donation as, despite medical advancements, human blood still cannot be synthesized artificially. He congratulated the SKIT family for setting new records of blood donation every year.

Prof. S. L. Surana also stressed the vital need of blood. He highlighted the alarming shortage of blood comparison in Indian hospitals in comparison with other countries. He motivated the staff and students to come forward and offer mankind this best gift. Dr. S. S. Agarwal applauded the consistent efforts of the SKIT family towards the noble cause. He told the audience that donating blood not only brightens up the spirit of the donor by giving him the internal satisfaction of having done something positive for society, it also triggers a process of rejuvenation of blood cells in his veins. He observed that serving society this way builds our total personality and gives us a positive attitude.

The Chief Guest, Dr.Lalit Mehra,described donation of blood as the most noble donation. He exhorted the youths to develop the habit of blood donation from young age only. He even went a step ahead and stressed the need for organ donation. He profusely lauded the student volunteers for demolishing the myth of weakness after blood donation. Dr. S.K.Calla, Director (Development and Welfare) moved a vote of thanks to the dignitaries and congratulated Mr.Ankush Tandon, Sr.Lecturer, Dept. of Electrical Engineering for making such well ordered arrangements and making the camp a success. The camp concluded with distribution of gifts to the blood donors.



ABHIVADAN 2014

The students organized a cultural programme on 17 September 2014 to mark and celebrate the Teachers' day and Engineers' day. They were present in large numbers and showed great zeal. It was a combination of several performances including songs, dances, skit, poetry recitation, etc. The teachers also came up with their performances. On the same occasion, trophies were awarded to the students who had won accolades at various technical events at various locations. The programme was attended by the members of management, faculty and staff.

SAE-INDIA VIRTUAL BAJA ATV INTERNATIONAL DESIGN COMPETITION

Devesh Jain, Jaijeet Singh Rathore, Ankur Sharma, and Uday Mathur all students of IV year Mechanical Engineering with faculty advisor Rajendra Singh Chundawat participated in SAE-INDIA Virtual BAJA ATV International Design competition held at Ahmedabad, Gujarat on 1 & 2 August. Virtual BAJA is an event organised by SAEINDIA and first time this event was held in North India at Gujarat Technical University (GTU), Ahmedabad. There were 300 teams from reputed engineering colleges from all over India. There were 18 Panels from the Industries (e.g. TATA MOTORS, MAHINDRA, and CUMMINS) for the selection of ATV Design. Our students designed an All Terrain Vehicle for extreme riding conditions. The team received certificates for participation in this competition.

FACULTY DEVELOPMENT ACTIVITIES

A training programme on Four Stroke Single Cylinder Variable Compression Spark Ignition Engine and Four Stroke Four Cylinder Variable Speed Compression Ignition Engine which have been acquired by the department under MODROB scheme of Govt. of India was organized on July 19, 2014. Mr. Nagraj from Technical Teaching (D) Equipments, Bangalore demonstrated functioning of both Engines. Thirty participants including staff and faculty members participated in the training programme. Mr. Ashish Nayyar (Reader) coordinated this training programme.

ANNUAL TECHNO MEET OF CAD DESK

An Annual Techno Meet was organized on 2 Aug. 2014 by CAD DESK, Jaipur. Two faculty members Mr. Sandeep Bhaskar and Mr. Arun Beniwal were deputed by the department to participate in this meet. Shri Surja Ram Meel, Chairman SKIT was the special guest for this meet.

PROF. BHARGAVA'S ORIENTATION CLASSES

Prof. M. L. Bhargava, Advisor, SKIT, conducted orientation sessions for students of B.Tech. I year in September. He discussed the role of engineers in society and oriented the students towards research and innovation.

SHRAMDAN



As a part of Independence Day celebration, the Department of Mechanical Engineering organized 'Shramdan' after the main Flag Hoisting ceremony. A large number of students, staff and faculty members of Mechanical Department enthusiastically participated in this activity and showed 'Dignity of Labour' by their participation. Mr. Ankit Agarwal (Sr. Lecturer) coordinated this activity. HOD congratulated all the participants and coordinators for the successful activity.

WEBINARS ATTENDED BY FACULTY

Faculty members of Department of Mechanical Engineering have attended IUCEE webinar series on "Outcomes Based Education" from 24 to 31 August 2014, by Dr. Krishna Vedula (Professor and Dean Emeritus, University of Massachusetts Lowell, USA, Executive Director, Indo US Collaboration for Engineering Education (IUCEE).

POSTER COMPETITION

On the occasion of Rajiv Gandhi Akshay Urja Diwas, Renewable Energy Club organized a Poster and Slogan competition on 20 August 2014. 72 students participated in it. The following students came up with flying colours and won the competition.

POSTER COMPETITION

1. Megha Nagar (I year CS)
2. Vatsa Lodha (I year CS)
3. Priya Chhaperwal (I year EE)

SLOGAN COMPETITION

1. Kabeer Chaturvedi (I year IT)
2. Kusum Vadhvani (I year IT)
3. Tulika Singh (I year CS)

WORKSHOP@SKIT.COM

A workshop on e-communication and e-etiquette was organised in the Business Administration Department of SKIT, Jaipur on 28 Aug. 2014.

The objective of the workshop was to create awareness about e-communication and e-etiquette through various activities and presentations by Dr. Krishna Sharma, Reader, Dept. of English, Dr. Shikha Agarwal, Sr. Lecturer, Dept. of English and Mr. Atul Gupta. The students created their individual blogs under the guidance of Dr. Shikha Agarwal. The event was coordinated by Dr. Krishna Dayal Sharma and Mr. Atul Gupta under the supervision of Dr. S.P. Garg, Dean, Business Administration.

OBJECTIVE TEST

The (ETC) Electrical Technical Club (under IE Students' Chapter) organized an Objective Test based on Physics, Chemistry, Mathematics, Circuit Analysis, Electrical Machine, Reasoning and Aptitude on 06 August 2014. 40 students participated in the competition. The top three students were

- i. Ajay Yadav, III Sem, EE-II Shift
- ii. Ronak Jain, III Sem, EE-II Shift
- iii. Sawan Kumar Agrawal, III Sem, EE-II Shift

QUIZ

The Electrical Technical club (IE Students' Chapter) organized an objective test as the qualifying exam for selecting student participants for Quiz which was conducted on Wednesday, 20 Aug. 2014. 7 teams were formed from 14 students. The event was attended by faculty members as well as students.

PROF. G. R. VERMA'S DISCOURSE

A special session by Prof. G. R. Verma, Professor Emeritus, University of Rhode Island, Kingston, U.S. was organized for students and faculty members on 20 September. He presented a motivational talk and discussed the importance of mathematics for the students. Narrating the excerpts from his own life he shared that the mathematicians have contributed with their utmost knowledge. He also enumerated the interesting ways to solve complicated sums.

QUIZZING 2014



The "Nirmaan" club of civil engineering department has organized a quiz competition for the students as a part of Wednesday activities. It was organized in two phases; the first round was held on 27 August 2014 and the final round on 3 September 2014. 32 teams participated in it.

The winning teams were FREAKS, FIREFOX and VIBRANTS. Four students from each team were awarded certificates by Prof. (Dr). S.L. Surana (Director, Academics), Dr. Vinita Sharma (Chief Coordinator, Extra Curricular Activities) and Mrs. Pooja Jain (Sr. Lecturer, Dept. of Civil Engineering).

Md. Junaid Khan, Shivani Saini, Nikita Panwar, Shivam Shrotriya, Prateek Mishra coordinated the competition.

CRT TRAINING SESSIONS

Dept. of CS/IT organized a one week training programme for the students. It encapsulated the training sessions on different modules including operating system, database management system, mobility and cloud computing, object oriented programming and basic programming.

LECTURE ON IBM BLUE-MIX RELATED TO CLOUD COMPUTING

A lecture was organized by Dept. of CS/IT on cloud computing. Mr. Mani Madhukar, an eminent figure in the field, addressed the gathering. Eight faculty members and 104 students attended the lecture. Mr. Mehul Maharshi, Sr. Lecturer, coordinated the event.

PROJECT SUBMISSION

All departments submitted 37 projects to Dept. of Science & Technology (DST), Rajasthan. Mr. Dheeraj Joshi, Reader, Dept. of ME coordinated the 'Project Submission'.

LAUNCHING OF COMPETENCY CENTRE UNDER MICROSOFT ED-VANTAGE PROGRAMME

Dept. of CS/IT launched a competence centre under Microsoft on 12 and 13 May, 2014. Mr. Pradeep Kumar, subject matter expert from Microsoft, delivered his speech on curriculum adoption and cloud curriculum adoption. Mr. Sunil Dhankar, Sr. Lecturer coordinated the activity.

CO-TEACH FOUNDATION PROGRAMME ELECTIVE

"Co-teach" is a new offering for Campus Connect Partner autonomous/deemed/recruitment institutions which gives an opportunity to the students to learn from Infosys subject matter experts and practitioners. It is organized by campus connect team of Infosys. Technology will be leveraged to carry these virtual classroom sessions to a live audience. This programme aims to make the students industry ready by providing application oriented exposure to fundamental concepts, and also by exposing them to the industry's best practices. The co-teach series focuses on the "Foundation Programme Project, Tools and Case Studies."

SALIENT FEATURES:

- Targeted at deemed universities and affiliated colleges having Infosys recruits in India;
- Electives co-created by Infosys and the partner institutions;
- Targeting 20% - 25% delivery of the overall 40 hour course by Infosys subject matter experts and practitioners;
- Co-teach sessions based on the inputs received from the institutions. We have scheduled two courses, Business Intelligence and Foundation Program (FP);
- The focus of the sessions is tightly integrated with the academic



schedule.

- The session recordings would be made available on the Campus Connect Portal.
- The portal will also offer offline learning mechanisms, such as discussion forum, additional resources etc.

BENEFITS TO STUDENTS

- Direct interaction of students with Infosys experts by leveraging

technology.

- Students will improve their application oriented knowledge and get an exposure to the industry's best practices.
- Students will get exposed to the industry's methods of teaching and learning.
- Case study based learning will strengthen the basic problem solving skills.

Webinar Topic	Date	Time	No. of Faculty members / Participants	No. of Students Participants	Total No. of Participants
FP Overview and Integrated Project Briefing session	06-Feb 2014	2:00 to 3:30 PM	33	55	88
Algorithmic Prototyping using Raptor	12-Feb	2:00 to 3:30 PM	37	61	98
Test Driven Development using Junit	19-Feb	2:00 to 3:30 PM	17	61	78
Code Analysis using PMD	26-Feb	2:00 to 3:30 PM	Not Attended (NIL)		
OO modeling using StarUML	05-Mar	2:00 to 3:30 PM	36	78	114
Software Configuration Management using Subversion	12-Mar	2:00 to 3:30 PM	27	68	95
Case study based approach Abstraction & Encapsulation	19-Mar Postponed to 26-Mar	2:00 to 3:30 PM	31	85	54
Case study-deriving relational schema design from ER model	26-Mar Postponed to 02-Apr	2:00 to 3:30 PM	29	62	91
Case study-Normalization	02-Apr Postponed to 09-Apr	2:00 to 3:30 PM	21	53	74
Case Study to solve the Query using different concept (Join, Independent and Correlated sub Query)	02-Apr Postponed to 09-Apr	2:00 to 3:30 PM	28	55	83

CS/IT faculty members from SKIT are being certified for "Inspire Faculty Excellence DC Awards-2014".

1. Mr. Mahendra Kumar Beniwal, Mr. Pankaj Dadheech (Gold Award).
2. Mr. Sanwanta Ram Dogiwal, Ms. Payal Gupta, Ms. Sanju Chaudhary, Ms. Kajal Mathur (Silver Award).
3. Mr. Naveen Jain, Ms. Richa Rawal (Bronze Award).

SOFT SKILLS PROGRAMME

Co-ordinator: Dr. Nidhi Sharma

It has been a long standing complaint of employers as well as managers that the newcomers, i.e., students fresh out of college / university lack soft skills and are unemployable. Colleges, on the one hand, expect the parents to teach them soft skills first and then send them to college, and parents put the ball back in the college's court blaming them for charging exorbitant fees and still not training their wards in soft skills. The result of this mutual blame game is that the students suffer. They fall far behind in etiquette & soft skills. Predominantly missing amongst students is the ability to communicate properly in the English language and express their views correctly and clearly. They realize this only when placement agencies come calling. While still there is time, all it requires is a little bit of extra effort from the faculty's side, a little care from the parents' side and a little more effort from the students. We all know that prevention is better than cure. Taking cognizance of this scenario SKIT has come up with a special soft skills cell in the Civil Block, equipped with a whole array of gadgets to provide the required ambience and instruction that would make our students outstand in the market.

The target of our coaching is the current job-market where there are too many job seekers and too few jobs. Good communication skills are invaluable during the job interview. If a candidate has less substance on the 'hard skill' side, good 'soft skills' can be an excellent balancing factor. We frequently come across superb conversationalists whose technical knowledge is not worth talking about, but who occupy high places in the industry. This is what we want to instill into our students.

The current soft skills programme of our college is comprised of twelve sessions wrapped up in a period of three months. These sessions engage the students in presentations, group discussions, role plays, debates, individual interpretations along with giving them a glimpse of the rudimentary requirements of the corporate and industrial world. Each Wednesday brings up an event which is effectively co-ordinated by the faculty members of the department of English. These events witness an encouraging participation by the students eventually raising a platform for their personality grooming. A list of events hosted by the soft skills cell and its respective winners is given below:

Date	Event	Winners
30 July 2014	War of words: Intersection Debate Competition	1- Akshita pachauri 2- Akansha Singh 3- Heena Solanki
6 August 2014	Teen poetry: Intersection Recitation Competition	English 1-Pooja Dwivedi 2-Aakarshak Singh Jasrotia 3- Ojasvi Saxena Hindi 1-Aishwarya Bhatnagar 2-Jhalak Bhatt
13 August 2014	Mighty Sword: Intersection Essay Competition	1-Shubham Asawa 2-Aman Purohit 3-Devendra Kumawat 3-Ayush Agarwal
20 August 2014	Table talk: Intersection Extempore Competition	1-Dushyant Kumar 2-Pooja Dwivedi 3-Harshita Rohatgi
27 August 2014	Theater: Intersection Skit Competition	1-ME(B)3rd semester 2-Section (B) 1st semester 3- CE 3rd semester
3 September 2014	Fiction: Intersection Story Telling Competition	1. Aashal Gautam 2. Aayushi 3. Alisha



SKIT CHHATRA SANSAD: NEW INITIATIVES



SKIT Chhatra Sansad is a non-political club of SKIT. The club held a condolence meeting for people who had died in the J&K flood tragedy. The Club members took an oath to generate and donate money in Prime Minister's Relief Fund to help the victims. A sum of Rs. 40,000/- was collected and donated for the noble cause of helping flood victims.

- The students of SKIT Chhatra Sansad showcased their talent in various inter college events. On the occasion of 'Hindi Fortnight' our students staged a play at MNIT, Jaipur to reinvigorate the use of Hindi. The play was appreciated and awarded.
- The club undertook community service on 24 September 2014. In the activity, stationery was distributed among the poor students of Government school, Jagatpura.



SHUBHAARAMBH: EMPOWERING FUTURE MANAGERS

A three day orientation programme, Shubhaarambh: Empowering Future Managers was organized by the dept. of Management Studies.

The programme was inaugurated by dignitaries including Shri P.N Bhandari, Member RERC, Shri Dev Kumar, Associate Director-HR,SSTL, Shri Surja Ram Meel, Chairman, Mr. Jaipal Meel, Director,Prof. (Dr.) S.L Surana ,Director Academics, Prof.(Dr.)S.K Calla, Principal, Prof. S.P Garg, Dean, Dept. of MBA, Shri Surja Ram Meel, Chairman, SKIT expressed his views on the importance of Management in life. He said that managers are always needed everywhere and in every field as well.

A session on ' Know your MBA Education' was conducted by Mr. Dev Kumar who threw light on future opportunities for the management students in various fields. He motivated the students by saying that "all of us do not have equal talent but all of us should have an equal opportunity to develop our talents".

Mr.P.N Bhandari shared some of his experiences during the time of his service. His main focus was to promote students for innovations. He asked students to modify their lives which will pave the way for a better society. He also exhorted the students to make right decisions in their lives.

Mera Parichay, Meri Pehchan enabled the freshers to introduce themselves. Various ice breaking and team building activities were organized to familiarize them with the MBA programme and the seniors.

The programme ended with a vote of thanks delivered by Ms. Maneesha Kaushik, Senior lecturer, dept.of MBA. The programme was coordinated by Ms. Maneesha Kaushik and Mr Atul Gupta, faculty members, Dept. of MBA.

DAY 2

Day 2 of the orientation programme, Shubhaarambh, at Swami Keshwanand Institute of Technology, started with the agenda of the overall development of the potential of the budding managers while creating awareness of all the existing clubs of the college like the Entrepreneurship Development Cell, Toastmasters International, Ecofriends club, NSS, Music and Dance club, Soft skills training, Gavels club and other sports clubs. It was followed by a session on 9

success mantras for a manager taken by prof. S.P.Garg."Main Bechonga Sab kuch bikta hai" saw enthusiastic participation by students. Its objective was to make them aware of the latest trends and technologies being used in the marketing sector. An interactive session with the alumni of the college was thoroughly enjoyed by the students. It was followed by some indoor games played by the students, and the winners were declared too.

DAY 3

The last day of the orientation programme – Shubhaarambh commenced with a general awareness quiz, Ms. Maneesha Kaushik being the quizmaster and Mrs. Ona Ladiwal the co-ordinator. It was followed by an extempore competition which saw the students speaking on a wide range of topics related to management education and an ice breaking session which intended to break the mutual coldness among new students. A session on ' Strengthening your Reading Habits' was very enlightening. It encouraged the students to inculcate good reading habits to make them effective managers. It was followed by a session on- 'The Value of values of life' taken by Professor M.L. Bhargava. He emphasized the need to remain ethical in all managerial decision making for the betterment of any organization as well as the country at large. The programme concluded with a valediction ceremony where prizes for various competitions were distributed by the Director of the college Shri Jaipal Meel, Principal, Dr.SK Calla, Director (Academics) Prof. S. L. Surana and Dean of DMS Prof. S.P.Garg.

BALKALAKAR- A SOCIAL ENTREPRENEURSHIP INITIATIVE

Department of Management Studies, in association with AISEC India, organized an event' Balkalakar an Initiative' to provide a platform for the underprivileged.

A movie was also screened in the Mechanical seminar hall for around 200 kids from various NGO's as a part of the event, to help them realize their dreams. The event was a huge success. It was inaugurated by Dr S.K. Calla (Principal SKIT) and followed by a welcome speech by Ms. Maneesha Kaushik. Radio partners for the event were 93.5 FM. The Radio Jokies too interacted with the kids and recorded their feedback on the event. It concluded with a vote of thanks extended by Dr. Ramesh Pachar, Vice Principal SKIT. This social entrepreneurship event was well coordinated by Dr. Savita Choudhary and Ms. Maneesha Kaushik.



CRAFTY RAFTS

Science and Technology Club organized an event 'Crafty Rafts' for I year students. More than 50 students participated in the event in which they were asked to make a raft which can hold maximum no. of objects before it sinks. The winners were Sonal Khanna, Sagar Sharma and Yogesh Kumawat. The runner-ups included Saurabh Chaturvedi, Harshit Mantri and Sunaina lalwani (II), Ritik Jain, Abhishek Agarwal and Ranjeev Kumar(III).

ACTIVITIES BY ECO FRIEND'S CLUB

- The club carried out a tree plantation activity on 7 August 2014 in association with NSS Club, SKIT & Dainik Bhasker in SKIT campus. The dignitaries including Prof. S. L. Surana and Prof. S. K. Calla also planted trees on the occasion.



- The club organized an essay writing competition on 12 August 2014. It was on "Global Warming: we have a solution; stop pollution". Several students participated in the competition.
- The club organized a competition on 27 August 2014 in which students were asked to create things of beauty some best articles out of waste. The activity was a huge success.
- The club conducted a bilingual poetry competition on environment. Students recited their compositions and were awarded for their performance.



WORKSHOP ON INDIAN ECONOMY: OPPORTUNITIES AND PROMISES

A workshop on Indian Economy: Opportunities and Promises was organized by Department of Management Studies on 16 July 2014. Students who gave presentation on the topic are as follows: Pooja Viya, Pankaj Singhal, Pooja Meena, Mahesh Sharma, Reena Birwa, Nirbhay Rao. Ms. Maneesha Kaushik and Mr. Atul Gupta also expressed their views on the emerging trends in Indian economy. Prof. S. P. Garg, Dean DMS, congratulated all the participants for their active participation in the workshop.

FACULTY WEBINAR ON - ORIENTATION TO ENTREPRENEURSHIP EDUCATION

NEN's orientation webinar on how to build a vibrant entrepreneurship eco-system on campus was organized on 15 July 2014.

The programme covered the components of an entrepreneurship ecosystem on campus and the lifecycle of a venture. It outlined fundamental entrepreneurial skills and concepts, in order to build awareness and engagement among students. Most importantly, the orientation webinar connected the faculty to colleagues across the country and introduced them to NEN resources. It also outlined their role as NEN faculty leaders. The Webinar was attended by all faculty members associated with TOPAZ, the entrepreneurship development cell of SKIT. The topics of discussion include:

- Essentials of an entrepreneurship ecosystem – Campus ecosystem model;
- Entrepreneurship Faculty: Teaching & mentoring roles;
- Programmes that focus on building entrepreneurship awareness & engagement among students;
- NEN Support: Tools, resources & recognition.

Discussion Experts: Marlina Ramachandran & Kruthika Muralinath. The Webinar was a huge success and it was well coordinated by Ms. Maneesha Kaushik, Head EDC SKIT and Mr. Mahendra Beniwal, Reader, Dept. of CSIT.

MEMORANDUM OF UNDERSTANDING SIGNED BY SKIT AND START UP OASIS

With an objective to promote innovations and entrepreneurship on the campus SKIT has signed an MOU with Start Up Oasis, a joint initiative with RIICO. Together we would work towards the development and promotion of entrepreneurship and an entrepreneurial culture in the institution, through business incubation services leading to the emergence of more and more entrepreneurs from the college. We would also exhort students to launch their startups and further provide business incubation and fund raising support to the students to share up entrepreneurship as a career option. Necessary mentoring and acceleration support would also be provided for helping the interested students to start and make their business plans ready for funding. Students of the institution would get preferential access to the various events and programs organised by Start up Oasis at the Startup Oasis Incubation Centre, which would expose the students to the entrepreneurial startup ecosystem and prepare them for entrepreneurship. Ms. Rachna Meel, Registrar, Prof. M. L. Bhargava, Adviser, Mr. Chintan Bakshi, CEO Start up Oasis and Ms. Maneesha Kaushik, Head, Entrepreneurship Development Cell were present on the occasion.

PROF. S.P. GARG SPEAKS - (DEAN, DEPT. OF MANAGEMENT STUDIES) : AN INTERVIEW

PAST JOURNEY - ASSOCIATION WITH SKIT

I am an alumni of IIM-A. I was there long back in the early 70s. I devoted four decades to the corporate sector in the field of finance. I have been overseas too. I have worked for Bank of Baroda in America. For the last five years of retirement from Bank of Baroda, I have worked as the Professor and Chairman of Jaipuria Institute of Management, one of the most prestigious institutes of Rajasthan. During that period, I conducted many image building programmes there.

During the last five years of association with academics, I used to be the guest speaker or panel speaker in various seminars at SKIT. After retirement from Jaipuria, it was a gainful situation for both me and SKIT.

CHALLENGES AT SKIT

- SKIT is a brand in technical engineering, but it's MBA is not the first cup of choice for the recruiters. Thus, brand building of management studies is a major challenge.
- The batch size isn't very impressive. Another challenge is to make the students attend the classes regularly.

COOPERATIVE TEAM

The management has been very supportive. It has declared that I will get full support in whatever endeavours I undertake for the betterment of my department. In my opinion, engineering works on fixed principles which cannot be altered, but a company can't run through books. Management studies have to incorporate day to day changes. This philosophy is being developed in the faculty and students and a learning atmosphere is thus being created. Although, it's tough to make people work beyond their comfort zone, the faculty members and the students are still moving with me in my style.

FIVE POINTS AGENDA

- (1) Academic excellence.
- (2) Faculty improvement - I fear that the knowledge of the faculty go obsolete, as I mentioned earlier that the scenario in management scenario keeps changing.
- (3) Image building of the MBA programme of SKIT.
- (4) Organising various student oriented development programmes.
- (5) Integrated development.

INDUSTRIAL VISITS

- Students of B.Tech. VII semester visited the STP plant at Delawas, Pratap Nagar, Jaipur on 31 August 2014 and 1 September 2014. The visit was conducted to enhance the knowledge of students about the procedure and working of the sewage treatment plant. Faculty Coordinators for the visit included Dr. Kedar Sharma, Mr. Pankaj Gupta, Mr. Manmohan Sharma and Mr. Pankaj Jain.
- Students of MBA visited Clay Craft India at VKI and Big Bazar, Tonk Road, on 29 September 2014. It gave practical knowledge and functional exposure in addition to theoretical knowledge. Mr. Atul Gupta and Ms. Maneesha Kaushik coordinated the visit.

MY SUCCESS MANTRAS FOR STUDENTS

- "Total Integrated Personal Development".

I am constantly working on strategies and programmes. Under these programmes, a group of students would be allocated to one teacher for their personality development. My policy allows the students to approach me for their developmental issues. But, I am a tough guy when it comes to discipline. ~ Cost Effective Quality Education with Total Development. This is my ultimate mantra, for that would enable my department to taste the flavours of progress and success.

MY SCHEME

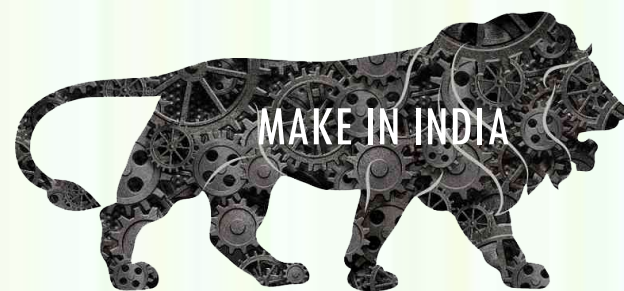
My main objective is to make the student a responsible citizen first and a good manager afterwards. I will be organising many student centric activities that include various short duration programmes on personality development and confidence building. I am also planning two workshops on E-communication and E-etiquette. These workshops will encompass not only management students, but technical students too. I intend to launch three categories of clubs, i.e., the Marketing Club, Finance Club and the HR Club.

A CLOSER LOOK

I belong to Jaipur. Throughout my forty years long career, I got opportunities to travel abroad, but I opted to stay in India. I have one daughter who is a doctor by profession and is settled in the US. I am blessed with two grand daughters whom I visit every year. I enjoy travelling and reading. I have a lot of passion for nurturing and developing young talents. I am an avid reader as I believe that everyday is a learning day and the process of learning shall never cease.

WORKSHOP ON MAKE IN INDIA

A workshop on 'Make in India' was organized by Prof. S. P. Garg, Dean, to make the MBA students aware of the importance of the cause undertaken by our prime minister. The students attended the workshop in large number.



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RESEARCH PAPERS PUBLISHED

Title : A Review on Waste Reduction through Value Stream Mapping Analysis
Journal : International Journal of Research (IJR) Vol. 1, Issue-6, July 2014, ISSN 2348-6848, Page 200-207
Author (s) : Praveen Saraswat, Lecturer, Dept. of ME, Manoj Kumar Sain, Reader, Dept. of ME

Title : Wideband Slow Light achievement in MIM Plasmonic waveguide by controlling Fano Resonance
Journal : ELSEVIER, Infrared Physics & Technology, Vol. 67, November 2014, Pages 25-29
Authors : Ms. Rukhsar Zafar, Sr. Lecturer, Dept. of ECE, M. Salim

Title : Facts , Fiction and Fabrication as a fabulating device unraveling the fractured Identity in Salman Rushdie's Midnights' Children
Journal : International Journal of English Literature , Language , Skills, Vol.3 , Issue 3, IJELLS – Oct.2014 , ISSN2278-0742
Author : Dr. Nidhi Sharma, Reader, Dept. of English

Title : Ultra Flattened Dispersion over Telecom Wavelength in Ring Based Photonic Crystal Fiber
Journal : IOSR Journal of Electronics and Communication Engineering (IOSR-JECE) e-ISSN: 2278-2834,p- ISSN: 2278-8735. Volume 9, Issue 4, Ver. IV (Jul - Aug. 2014)
Authors : Yazusha Sharma , Ms. Rukhsar Zafar, Sr. Lecturer, Dept. of ECE

Title : An under-frequency based islanding scheme of Rajasthan Power System
Journal : International Journal of Electrical & Electronics Engg. Research (JEEER), Vol. 4, Issue 1, Feb. 2014, impact factor 5.64
Author : Mr. Sarfaraz Nawaz, Reader, Dept. of EE

RESEARCH PAPERS PRESENTED

Title : Optimization of Feed-Line Dimensions for the Rectangular Micro-strip Patch antenna by using Bhatnagar's Postulates
Date : 22-23 Aug. 2014.
Seminar : IETE Zonal –North National Seminar on 'Future Trends in Communication Technologies' at Manipal University
Presenter : Mrs. Monika Mathur, Abhijat Vats, Ghanshyam Singh, Prof. S. K. Bhatnagar, Dept. of ECE

Title : Design and Implementation of Microstrip Antenna with Novel Fractal Geometry".
Date : 22-23 Aug. 2014.

Seminar : IETE Zonal –North National Seminar on 'Future Trends in Communication Technologies at Manipal University
Presenter : Mrs. Monika Mathur, Mr. Satish Somani, Mr. Ghanshyam Singh and Prof. S.K. Bhatnagar, Dept. of ECE

PAPER REVIEWED

Title : Modelling the Green Manufacturing Implementation Factors: An ISM approach
Journal : Emerald – Measuring Business Excellence
Reviewed By : Prof. Alok Mathur, Dept. of ME

CONFERENCE /WORKSHOP AND SHORT TERM COURSES ATTENDED

Title : Recent advances in hydrogen fueling in IC Engines
Date : 07 to 11 July, 2014
Organised By : TEQIP, IIT Delhi
Venue : IIT Delhi
Attended By : Mr. Dinesh Kumar Sharma, Sr. Lecturer, Dept. of ME

Title : Short Term Course on CAD/CAM and Advance Machining
Date : 01 to 5 July 2014
Organized By : Motilal Nehru National Institute of Technology (MNNIT), Allahabad
Venue : MNNIT, Allahabad
Attended By : Mr. Manoj Kumar Sain, Reader, Dept. of ME, Mr. Praveen Saraswat, Lecturer, Dept. of ME

Title : Train the Trainer Workshop on Agile Software Development
Date : 14 -16 July 2014
Venue : National Institute of Technology, Kurushetra.
Attended by : Mr. Manoj Nama, Mr. Mehul Maharshi, Senior Lecturer, Dept. of CS/ IT

Title : Short term Course on Emerging Technologies: Electronic Devices and Materials in Current Scenario
Date : 1- 4 October 2014
Venue : Material Research Centre, MNIT Jaipur
Attended By : Mrs. Shubhi Jain, Mrs. Manju Choudhary, Ms. Rukhsar Zafar, Mr. P. K. Jain, Mrs. Monika Mathur, Dept. of ECE

Title : Short term Course on "Application of Nanotechnology in Current Scenerio"
Date : 22-26 August 2014
Venue : Material Research Centre, MNIT Jaipur
Attended By : Mr. P. K. Jain, Reader, Mrs. Swati Arora, Sr. Lecturer, Dept. of ECE

EXTERNAL AFFAIRS

- Dr. N. K. Banthiya has been invited as a member of Review Committee of Journal of Vivekanand Group of Institutions.
- A planning meeting for 2nd International Conference on Transformations in Engineering Education 2015 was organized by Dr. Krishna Vedula (Co-Chair, ICTIEE 2015) in JECRC University, Jaipur dated August 21, 2014. Dr. N. K. Banthiya, Mr. Dheeraj Joshi, Mr. Manoj Kumar Sain, Ms. Sarita Choudhary, Mr. Ankit Agarwal and Mr. Dinesh Sharma participated in this planning meeting.

WELCOME NEW ARRIVALS

The SKIT family extends a heart welcome to all the faculty members who have joined us during the current academic session. We wish them a bright career and a rewarding stay at SKIT.

Department of Management studies

Prof. S. P. Garg, Dean

Department of Mechanical Engineering

Mr. Brij Mohan Sharma, Sr. Lecturer
Mr. Deepankar Pacharia, Sr. Lecturer
Mr. Vinay Kumar, Sr. Lecturer
Mr. Yogesh Kumar Sharma, Lecturer
Mr. Virendra Kumar Nagar, Lecturer
Mr. Suman Anand, Lecturer
Mr. Himanshu Singh Rathore, Lecturer
Ms. Priyanka Gupta, Lecturer
Mr. Keshav Jakhota, Lecturer

Department of Electrical Engineering

Mr. Mohd. Imran, Sr. Lecturer
Mr. Sumit Gill, Lecturer
Ms. Juhi Singhal, Lecturer
Mr. Ankit Vijayvargiya, Lecturer

Department of Basic Sciences and Humanities

Dr. Sudha Calla, Incharge
Dr. Krishna Dayal Sharma, Reader, Dept. of English
Dr. Shikha Agarwal, Sr. Lecturer, Dept. of English
Mr. Pawan Jain, Lecturer, Dept. of Physics
Ms. Mahima Kapoor, Lecturer, Dept. of Chemistry
Dr. Vijay K. Singhal, Reader, Dept. of Mathematics

Dept. of Civil Engineering

Mr. Pankaj Jain, Lecturer
Ms. Priyanka Gupta, Sr. Lecturer
Mr. Nishant Sachdeva, Lecturer
Mr. Nitesh Amberia, Lecturer
Ms. Sarita Singh, Sr. Lecturer
Ms. Suniti Kumari, Lecturer
Mr. Himanshu Meel, Sr. Lecturer

Dept. of CS/IT

Mr. Chhagan Chaudhary, Reader
Mr. Basant Agrawal, Reader
Mr. Anil Prajapati, Lecturer
Mr. Shubham Gupta, Lecturer

Mr. KanakGiri, Lecturer
Ms. Apoorva Sikka, Lecturer
Ms. Anjali Pandey, Sr. Lecturer

Dept. of Electronics and Communication

Ms. Mamta Jain, Reader
Mr. Vipin Kumar Garg, Sr. Lecturer
Mr. Sanjay Sharma, Sr. Lecturer
Ms. Smita Prajapat, Sr. Lecturer
Ms. Gloria Joseph, Lecturer

NEN FACULTY LEADERS NETWORKING MEET 2014

TOPAZ (entrepreneurship development cell, SKIT) organised NEN Faculty Leaders Networking Meet 2014 on 20 August, in association with National Entrepreneurship Network (NEN). The networking meet was organised in order to help various e-cells to promote entrepreneurship on campuses. It was attended by fifteen faculty members from more than eight colleges. They appreciated this initiative and agreed it would prove to be beneficial in creating and supporting entrepreneurs on their respective campuses.

Prof. S.L. Surana, Director (Academics), SKIT, Prof. M.L. Bhargava, Advisor, SKIT and Ms. Maneesha Kaushik, Faculty Head, TOPAZ attended the meeting and contributed their valuable suggestions as to how entrepreneurship can be given wings. The various sessions of the networking meet were very useful and thought provoking. It also gave an opportunity to faculty leaders share their experiences with each other and they promised to extend their cooperation and help. Ms. Preeti Singh, National Head, NEN also asked the faculty leaders to create an ecosystem for converting ideas into successful ventures. The NEN Faculty Leaders Networking Meet 2014 generated conducive and constructive ideas for promoting entrepreneurship and was a great success.

SAVE THE TIGER CAMPAIGN

SKIT AND TOPAZ organized a CSR activity to promote the "SAVE THE TIGER" campaign using unique technology. A signature campaign was also organized where more than 200 students participated and were sensitized to the cause. The students interacted with the star cast of the movie 'Roar: Tigers of the Sundarbans'. The event was a huge success and was coordinated by Dr. Savita Choudhary, Dr. Amber Shivastava and Ms. Maneesha Kaushik, Faculty Head, EDC, SKIT. ROAR: Tigers of The Sundarbans is an adventurers film set in the Sundarbans, which is India's largest mangrove forest with 400 tigers. It has been directed by Mr. Kamal Sadanah. An international team involved in its making, boasts of heavy VFX. It has been shot in the same studio where films like 'Resident Evil' and 'Life of Pi' were made.



E-MOMENTUM 2014

*It's time again to spark a moment,
It's time again to frame a goal,
It's time again to make a difference,
It's time again to lift a soul...*

TOPAZ, the Entrepreneurship Development Cell of SKIT, began its journey for the session 2014-2015 through "E-Momentum 2014", the orientation ceremony on 3 September 2014. Keeping the true spirit of entrepreneurship and novelty alive, the orientation ceremony aimed at instilling the sense of entrepreneurship among the students and faculty members. "E-Momentum 2014" expressed the notion that we are the masters of our fate and we are the captains of our souls. Ms. Maneesha Kaushik, Faculty Head, TOPAZ delivered a welcome note and briefed the audience about TOPAZ and its mission to pursue excellence with all its endeavours. Mr. A.K. Gupta, CGM, RIICO presided over the ceremony as the Chief Guest. Mr. Ashish, Manager, Rajasthan Venture Capital Fund, Mr. Chintan Bakshi, Founder, Start-Up Oasis and Mr. Dilnawaz Khan, Founder, Start-Up Oasis graced the event as Guests of Honour.

Mr. Gupta spoke on the importance of creating more entrepreneurs as they play a major role in shaping our nation's economy. He highlighted upon the fact that there have been many entrepreneurs who have accentuated taken India to a coveted height and now it is the right time to explore new avenues of excellence. He also stated that RIICO would extend help to the students in their start-up ventures. Mr. Ashish delivered a talk on "How Venture Capitalists and Angel Funds prove helpful in converting innovative ideas into projects in the interest of society". His talk proved to be thought provoking for the students. Mr. Bakshi unveiled the Memorandum of Understanding (MoU) signed between SKIT and Start-Up Oasis. He shared how students can be benefited by the MoU as it will create an entrepreneurial environment and ecosystem in the campus.

The E-Leaders staged a play on the entrepreneurial journey of Mahashay Dharampal, owner of MDH Spices. The play bagged a huge appreciation. The E-Leaders also screened TOPAZ After-movie which narrated the achievements of team TOPAZ for the session 2013-2014. "Entrebus" also grabbed everyone's attention and was well applauded by the audience. The ceremony was presided over by Mr. Jaipal Meel, Director, SKIT, Prof. S.L. Surana, Director (Academics), SKIT and Dr. S.K. Calla, Principal, SKIT. Prof. M.L. Bhargava, Adviser, SKIT spoke on the versatility of the entrepreneurs and proposed a vote of thanks. The event was coordinated by Ms. Maneesha Kaushik, Faculty Head, TOPAZ.

RTU INTERCOLLEGE VOLLEYBALL TOURNAMENT

Rajasthan Technical University (RTU) inter-college Volleyball Tournament was hosted by SKIT on 19-21 September, 2014. The inaugural ceremony witnessed the presence of dignitaries including Mr. M. M. Ansari (Sports Officer UCE RTU, Kota) as the chief guest, Mr. Jaipal Meel, Director, Prof. S. L. Surana, Director Academics, Dr. S. K. Calla, Prof. Ramesh Pachar. 22 teams of boys and 10 teams of girls participated in the tournament. The winner in girls' category was Rajasthan College of Engineering for Women and in boys' category, Vivekanand Institute of Technology won the competition. The runner ups included Poornima Institute of Engineering and Technology in

girls and Jaipur Engineering College in boys category respectively. The tournament was organized by sports secretary Mr. Hiralal Chaudhary, Ankit Jat (CE-IV year) and Anurag Singh (CS-III year).

CARVING A NICHE IN SPORTS

The following students of SKIT have been selected in RTU sports team during the inter college sports tournament. They will represent RTU in West Zone sports fest.

Boys:- Ankit Jat (CE-IV year), Yuvraj Singh (CE-III year)
Girls:- Divya Pathak (ECE-IV year), Tripti Jain (Ist year)

Players selected in RTU Basketball Team :-

Boys:- Dharamveer Jadon (CS-IV year), Yogesh Saroha (MBA-I year)
Yuvraj Singh (CE-III year), Rahul Jhalaria (CE-II year)
Girls:- Manali Khatri (ECE-IV year), Tarushi Sharma (ECE-II year)

Players selected in RTU Badminton Team:-

Boys:- Mayank Soni (ECE-II year), Yash Vijay (I year)
Girls:- Nivedita Jha (ECE-III year)

WORKSHOP ON "MAHATMA GANDHI – A MANAGEMENT GURU AND ENTREPRENEUR

*A class apart, a heart of gold, A brilliant mind, a lesson still told.
Righteousness and confidence was all he had,
He could easily bring smiles to faces sad.
Creativity and principles were at the core,
We wish to know about him more and more...*

TOPAZ (Entrepreneurship Development Cell, SKIT) and Department of Management Studies organized an awareness and sensitization workshop on "Mahatma Gandhi – A Management Guru and Entrepreneur" on 24 September, 2014. Keeping the Gandhian philosophies and ideologies alive, the workshop was organized in order to provide an insight into the life of the great visionary and leader. Dr. N.D. Mathur, Professor, University of Rajasthan presided over the workshop as the Chief Guest. He discussed the presence of Gandhian element in each one of us in the form of innovation, truth and conscience. He enumerated various qualities of Gandhiji which are not known to many. In his talk, he laid stress on Gandhian principles and his cardinals. Prof. Vikas Shrotriya, Head, DMS welcomed the audience and introduced the theme of the workshop. Prof. (Dr.) S.L. Surana, Director (Academics), SKIT spoke on the relevance of Mahatma Gandhi in current times. Prof. N.K. Banthiya, HOD, Mechanical Engineering Department, SKIT discussed Gandhi as an institution of learning. He emphasized on the perception of Gandhi – an inspirational leader whose ideology was worth millions. Prof. S.P. Garg, Dean, DMS also professed his notions on Gandhi as the greatest Management Guru of the world who transformed all his perceptions into reality.

A documentary based on the life of Mahatma Gandhi left the audience spell-bound. The workshop witnessed participants from students and faculty members. A quiz competition on Mahatma Gandhi's life was also held to test the students' general knowledge. The winners were felicitated with a copy of Gandhi's autobiography "The Story of My Experiments with Truth" and a Certificate of Appreciation. Poems and Bhajans dedicated to Mahatma Gandhi filled the atmosphere with reverence for the Father of the Nation. Proposing a vote of thanks, Ms. Maneesha Kaushik, Programme Coordinator also praised Gandhi for his thoughtful ventures and great ideologies.

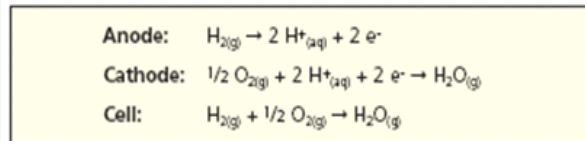
FUEL CELL

The 19th century was the century of the steam engine and the 20 century was the century of the internal combustion engine, it is likely that the 21 century will be the century of the fuel cell.

A fuel cell is an electrochemical energy conversion device that converts hydrogen and oxygen into electricity, heat, and water. Fuel cells are often compared to batteries. Both convert the energy produced by a chemical reaction into usable electric power and also as a by-product of this process, into heat.

However, a battery holds a closed store of energy within it and once this is depleted, the battery must be discarded, or recharged by using an external supply of electricity to drive the electrochemical reaction in the reverse direction.

A fuel cell, on the other hand, uses an external supply of chemical energy and can run indefinitely, as long as it is supplied with a source of hydrogen and a source of oxygen (usually air). The source of hydrogen is generally referred to as the fuel and this gives the fuel cell its name, although there is no combustion involved. Oxidation of the hydrogen instead takes place electrochemically in a very efficient way. During oxidation, hydrogen atoms react with oxygen atoms to form water; in the process electrons are released and flow through an external circuit as an electric current.



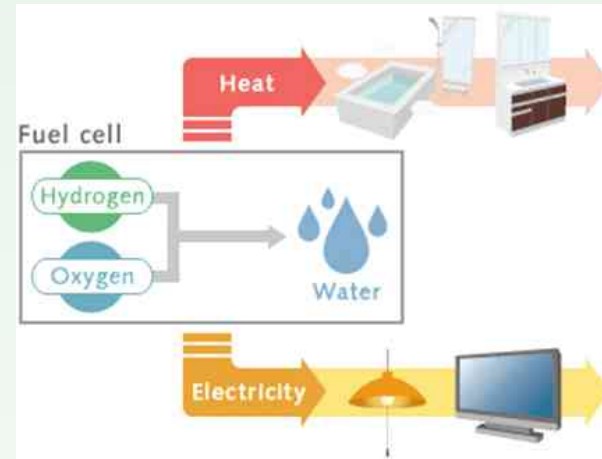
Because hydrogen & oxygen gases are electrochemically converted into water, fuel cells have many advantages over heat engines. These include high efficiency, virtually silent operation and, if hydrogen is the fuel, there are no pollutant emissions. If the hydrogen is produced from renewable energy sources, then the electrical power produced can be truly sustainable.

Fuel cells can vary from tiny devices producing only a few watts of electricity, right up to large power plants producing megawatts. All fuel cells are based around a central design using two electrodes separated by a solid or liquid electrolyte that carries electrically charged particles between them. A catalyst is often used to speed up the reactions at the electrodes. Fuel cell types are generally classified according to the nature of the electrolyte they use. Each type requires particular materials and fuels and is suitable for different applications.

There is even more potential benefit from fuel cells. The low temperature heat that is produced from large fuel

cells can also be used to provide space heating to nearby structures. This is called cogeneration, the dual generation of energy for both electricity and heat. Under these conditions, fuel cell efficiencies can reach 80-90%; and remain clean for the environment. Versatile fuel cells offer a promising way to generate electricity and on a vastly decentralized basis.

Basic fuel cells running on pure hydrogen are pollution free, giving only electricity, water, and heat. The potential for fuel cells to provide zero or near-zero emissions has been a significant force in the development of the technology over the past 30 years, and is drawing increasing attention to the technology today.



* Because there is no combustion in a fuel cell, fuel is converted to electricity more efficiently than any other electrical generating technology available today.

* There are no moving parts in a fuel cell stack, making them more reliable and quieter than generators. Even the ancillary systems (fans, pumps, controls, and etcetera) in a complete fuel cell unit are relatively mature and simple technologies that should prove extremely reliable.

* Unlike batteries that must be disposed of once their chemicals are used up, fuel cell reactions do not degrade over time and can theoretically provide continuous electricity.

* Traditional power plants must be large in order to gain efficiency, but fuel cells can achieve higher efficiencies at any scale, making them perfect for small portable, residential, and transportation uses.

* Because fuel cells are clean and efficient at any size, they can be located almost anywhere, including dense urban areas where both air quality and transmission congestion may be of concern. Fuel cells can offer an alternative to building new power lines, while also reducing dependence on foreign oil. Fuel cells can provide more reliable power wherever electricity is needed, making the whole electric power grid more robust and reliable. Distributed application of small fuel cells will also enhance security of key infrastructures, such as our communication and water systems.

* Economically, fuel cells represent a prudent path to provide the country's electric power because they can be installed quickly, are fuel flexible, and can be put in place incrementally, mitigating the need for more costly and sweeping changes.

In the past, fuel cells were large and extremely expensive to manufacture, just as the first calculators and computers were. But, just like these products, the cost of fuel cells quickly comes down to consumer-affordable levels with mass production. We are currently in a transition period now, where many fuel cell companies are investing literally hundreds of millions of dollars to gear up for mass manufacturing at the same time they are trying to begin to develop a variety of markets for their product.

So we can conclude that Fuel cells are a promising technology which can be used as a source of heat and electricity for buildings, and as an electrical power source for electric motors propelling vehicles.

Dr. Vinita Sharma
Reader, Dept. of Chemistry

HEAT RECOVERY WHEEL

DRI Heat Recovery Wheel is equipped with Eco Fresh Energy Recovery Wheels (ERW); capable of recovering more than upto 75% of sensible and latent energy from the stale exhaust air and transferring it to the fresh outside air. The rotating wheel transfers the sensible and latent energy between the counter flowing exhaust and supply air and in the process preconditions (cool/ heat/ dehumidify/ humidify) the fresh air.

Need for recirculating air

- At the workplaces, huge number of people exhale CO₂ which may make the indoor air unhygienic.
- Normally, an AC brings only 20% fresh air, but with HRW 100% will be brought which is desired when many people are at workplace.
- If fresh O₂ is not inhaled for a long time, breathing problem, headache and other diseases may occur.

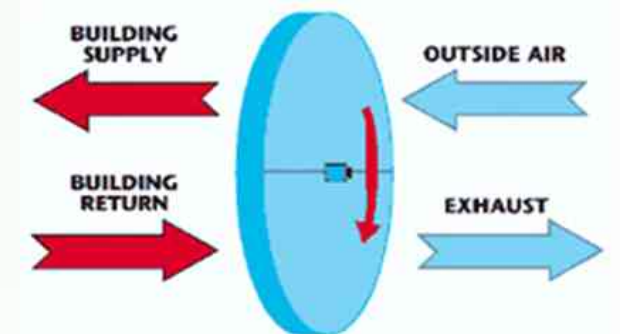
For Increased ventilation rates, which are required to satisfy the ventilation standard ASHRAE 62.1-2004, mean a greater expenditure of energy to condition outside air. One way that savings can be realized in an HVAC system is through the use of exhaust air energy recovery. Heat recovery systems are a great way to save energy, and therefore beneficial, for building owners. They reduce energy bills by using the expelled air to heat (or cool) the incoming air, depending on the season. Most designs use a great invention known as the thermal wheel to operate.



Figure : Cut section view of HRW set up

What are thermal wheels? Thermal wheels are perforated spinning wheels or discs that allow the transfer of heat between two closest flows of air. In the winter months heat recovery ventilators allow the heat from any air being expelled, to be removed, and used to warm the incoming air. This can substantially reduce the heating required and thus save fuel. Obviously the reverse process can be used in the summer months, where air conditioning is in use. In this case the air being expelled is used to cool the hot incoming air. In both cases the energy requirements are substantially reduced. How do they work? The heart of the Energy Recovery wheel is the EcoFresh desiccant coated energy recovery wheel, which slowly rotates between its two sections. In one section, the room conditioned return air is passed through the wheel, and exhausted to the atmosphere. During this process, the wheel absorbs sensible and latent energy from the conditioned air, which is used to pre-condition the incoming fresh Air in the other section, during the second half of its rotation cycle. Thus, we can have more fresh Air at lower energy costs inside conditioned space.

Energy recovery wheels are also called heat wheels and enthalpy wheels. Although many people use the phrases interchangeably, the term heat wheel is sometimes used to distinguish a sensible application only. Enthalpy wheel is used to distinguish a combined sensible and latent energy transfer application. In both cases, the fundamental piece of equipment is nearly identical. A rotary air-to-air energy exchanger has a revolving wheel filled with an air-permeable medium having a large internal surface area. The exchanger is designed to be positioned between two adjacent ducts with opposing flow directions. The wheel rotates between 10 and 60 revolutions per minute depending on the application. When the wheel passes through the high-temperature air stream, the media temperature increases as heat is transferred and stored in the individual filaments. This form of heat transfer is purely sensible and is driven by a temperature gradient between the high- and low-temperature air streams. In most comfort-to-comfort applications, the temperature difference is relatively small as compared to some process energy recovery applications.



Some applications of HRW are as follows:

- Schools and universities
- Office buildings
- Nursing homes
- Retail shopping centers
- Industrial applications with fumes or smoke (e.g., welding operations)
- Industrial applications with toxic or noxious exhaust
- Restaurants or kitchens
- Specialized hospital treatment areas
- Gymnasiums
- Hospitals
- Correctional facilities
- Laboratory fume hood exhaust

Mr. Ankit Agarwal
Sr. Lecturer, Dept. of ME

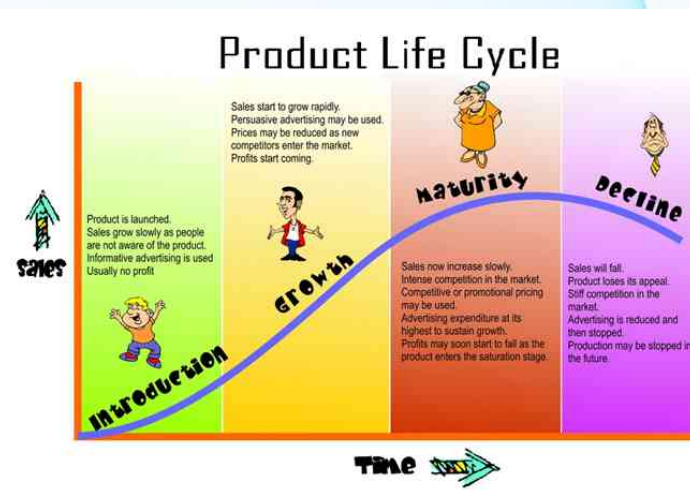
PRODUCT LIFE CYCLE FOR REVITALIZING THE BUSINESS

Any business is constantly seeking ways to grow future cash flows by maximizing revenue from the sale of products and services. Cash flow allows a company to maintain viability, invest in new product development and improve its workforce; in an effort to acquire additional market share and become a leader in its respective industry. A consistent and sustainable cash flow stream from product sales is key to any long-term investment.

Product life cycle (PLC) is an important concept in marketing. PLC describes the stage a product goes through from introduction to withdrawal or eventual demise. Product life cycles are becoming shorter and shorter and many products in mature industries are revitalized by product differentiation and market segmentation. Organizations increasingly reassess product life cycle costs and revenues as the time available to sell a product and recover the investment in it shrinks for emerging businesses, the cycle concept is an ideal tool that enables marketers to forecast future sales and plan new marketing strategies. The marketer's marketing objectives depend mostly on where the product is in its life cycle.

The main stages of the product life cycle are:

1. Introduction: The Introduction stage is the most important stage in the PLC. In fact, most products that fail, do so in the introduction stage. This is the stage in which the product is initially promoted. There's heavy marketing activity, product promotion and the product is put into limited outlets in a few channels for distribution. Public awareness is very important to the success of a product. If people don't know about the product they won't go out and buy it. Sales take off slowly in this stage. The company needs to create awareness, not profits.



There are two different strategies companies use to introduce their product to consumers. Companies use either a penetration strategy or a skimming strategy. If a penetration strategy is used then prices are set very high initially and then gradually lowered over time. This is a good strategy to use if there are few competitors for the product. Profits are high with this strategy but there is also a great deal of risk. If people don't want to pay high prices company may lose out. The second pricing strategy is a skimming strategy. In this case

companies set product price very low at the beginning and then gradually increase them. This is a good strategy to use if there are a lot of competitors who control a large portion of the market. Profits are not a concern under this strategy.

The most important thing here is to get the product known to the customers or market and worry about making money at a later time.

2. Growth: In this stage, sales take off, the market knows the product; other companies are attracted, profits begin to come in and market shares stabilize. Once company gets to this point it will probably not be able to take anymore of the market from its competitors. In this stage a very large amount of money is spent on advertising. Company concentrates of telling the consumer how much better its product is than competitors' products. Company could get lucky and customers who have bought your product will give good word-of-mouth to their friends/family.

3. Maturity: In this stage sales grow at slowing rates and finally stabilize. The key to survive this stage is differentiating the product from the similar products offered by the competitors. Price wars and sales promotion become common and a few weaker players exit. Due to the fact that sales are beginning to stabilize company must make its product stand out among the rest.

4. Decline: This is the stage in which sales of the product begin to fall. Either everyone has bought company product or wants new product, more innovative products have been created that replace company product or the product is no longer relevant or useful. In this stage price wars continue, many companies decide to withdraw their products from the market due to the downturn. Cost control becomes the way out for most products in this stage.

Not all products reach the final stage. Some continue to grow and others rise and fall. The product life cycle can help analyzing product and industry maturity stages. The concept of life cycle stages has a significant impact upon business strategy and performance. The product life cycle method identifies the distinct stages affecting sales of a product, from the product's inception until its retirement.

Very few products follow the same cycle. Many products don't even make it through all four stages. Some stages even bypass stages. For example, one product may go straight from the Introduction stage to the Maturity stage. This is the problem with the PLC. There is no set way for a product to go. Therefore, every product requires a great deal of research and close supervision throughout its life. Without proper research and supervision your product will probably never get out of the first stage.

A branded product can enjoy continuous growth, such as Microsoft, because the product is being constantly improved and advertised, and maintains a strong brand loyalty.

Companies use various extension (marketing) strategies to extend the life of the product or increase the sale of the product before it goes into decline. Examples of the techniques are:

- Advertising – try to gain a new audience or remind the current audience
- Price reduction – more attractive to customers
- Adding value – add new features to the current product, e.g.

- video messaging on mobile phones
- Explore new markets – try selling abroad
- New packaging - brightening up old packaging, or subtle changes such as putting crisps in foil packets or Seventies music compilations

PLC analysis, if done properly, alerts a company as to the health of the product in relation to the market it serves. PLC forces a continuous scan of the market and allows the company to take corrective action faster. But the process is rarely easy.

Mr. D.Hariyani and Mr. A.K.Mathur
Readers, Department of ME

HYBRID MACHINING PROCESS

With the new developments of technology, the advanced manufacturing processes are increasingly hybridized with other conventional and advanced machining processes to produce entirely new techniques named hybrid machining processes with superior performance characteristics. Rapid technological advancement after Second World War has led to the development of ultra hard, high strength, difficult-to-machine materials and alloys such as stainless steel, superalloys, titanium and its alloys, composites, etc. having high strength to weight ratio and possess a very low machinability. Producing complicated geometries and maintaining high dimensional accuracy in such materials become extremely difficult with the conventional machining processes. These shortcomings of conventional machining processes necessitates the development of newer concepts in manufacturing which lead to the evolution of advanced machining processes (AMPs), often called modern machining processes, nontraditional machining methods or unconventional machining processes.

To further enhance the capabilities of AMPs, hybrid machining processes (HMPs) are evolved out. A hybrid machining process can be achieved by combining either an AMP with a conventional machining process, or combining two or more than two AMPs to meet the stringent production requirements with high productivity. The objectives for such combinations are to simultaneously utilize the combined advantages and to minimize the adverse effects of the constituent processes when they are applied individually. In recent years, electrochemical based hybrid machining processes (EC-HMPs) draw attention of the research community for its capability to process difficult-to-machine materials and to produce burr free surface with surface finish of micro / nano level.

The reason for such a combination and the development of a hybrid machining process is mainly to make use of the combined advantages and to avoid or reduce some adverse effects the constituent processes produce when they are individually applied. The performance characteristics of a hybrid process are considerably different from those of the single-phase processes in terms of productivity, accuracy, and surface quality. A typical list of hybrid machining processes and their constituents machining processes are shown in Fig.

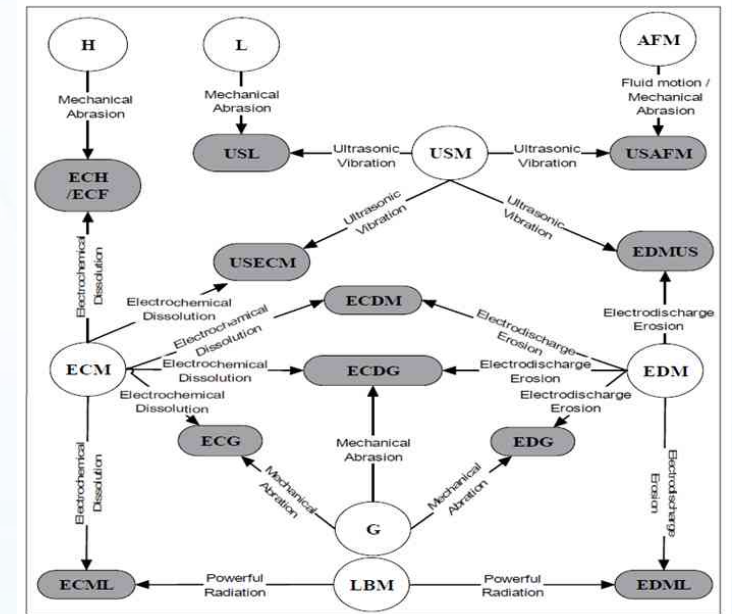


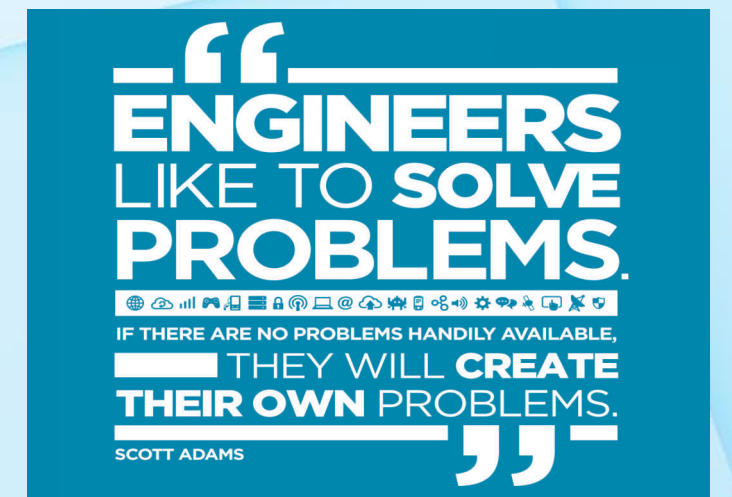
Figure- A typical list of hybrid machining processes & their constituents

[G: Grinding; H: Honing; L: Lapping; AFM: Abrasive Flow Machining; ECM: Electrochemical Machining; EDM: Electric Discharge Machining; LBM: Laser Beam Machining; USM: Ultrasonic Machining; ECDG: Electrochemical Discharge Grinding; ECDM: Electrochemical Discharge Machining; ECF: Electrochemical Finishing; ECG: Electrochemical Grinding; ECH: Electrochemical Honing; ECML: Laser Assisted Electrochemical; EDG: Electric Discharge Grinding; EDMUS: Ultrasonic Assisted Electric Discharge Machining; EDML: Laser Assisted Electric Discharge Machining; USAFM: Ultrasonic Assisted Abrasive Flow Machining; USECM: Ultrasonic Assisted Electrochemical Machining; USL: Ultrasonic Assisted Lapping]

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SMART GLASSES



Smart Glasses will be obtained through an optical head-mounted display or computerized internet-connected glasses with transparent heads-up display (HUD) or augmented reality (AR) overlay that has the capability of reflecting projected digital images as well as allows the user to see through it. Smart glasses utilizing cellular technology or Wi-Fi, modern smart glasses are effectively wearable computers which can run self-contained mobile apps. The idea of the smart glasses is to give people of poor vision an aid that boosts their awareness of what's around them – allowing greater freedom, independence and confidence to get about, and a much improved quality of life.

The glasses would have a spectacle-mounted 3D camera that would enhance images of nearby shapes and objects. It would highlight and outline them clearly on the inside of small transparent displays that are part of the spectacle lenses. Smart glasses will often also have a camera. Significant differences to other camera devices are that the pictures or videos are taken from the users point of view, there is no need for the user to hold the device in his hands and the vision of the user is not concluded. This camera can see what the wearer sees at any time. In combination with eye tracking technology the devices can determine exactly what the wearer is looking at. This allows the device to get crucial information about the users interests, activities, surroundings and occupation. For example Virtual reality glasses could be used to teach history by allowing the students to view historical sites not only through textbooks but in a virtual 3D world in which they could move around freely.

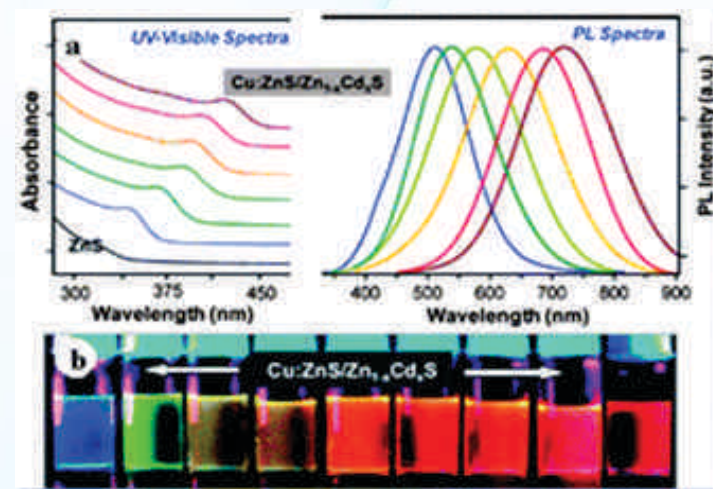
Ms. Shubhi Jain,
Sr. Lecturer, Dept. of ECE

DOPED NANOCRYSTALS

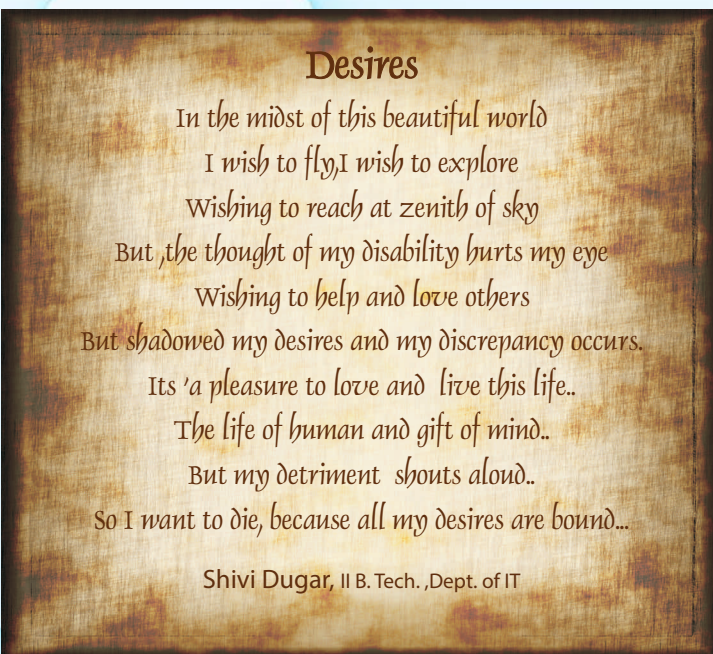
An abundance of semiconductor nanocrystals, also named quantum dots (QDs), have been developed with their unique physical and chemical properties, with size-tunable light emission, high photostability, and multiple fluorescence colours. Recently, the synthesis of doped semiconductor nanocrystals has become an active subject in the field of materials chemistry. The introduction of impurity atoms into the synthetic process to alter the properties of

An abundance of semiconductor nanocrystals, also named quantum dots (QDs), have been developed with their unique physical and chemical properties, with size-tunable light emission, high photostability, and multiple fluorescence colours. Recently, the synthesis of doped semiconductor nanocrystals has become an active subject in the field of materials chemistry. The introduction of impurity atoms into the synthetic process to alter the properties of semiconductor materials in desirable and a controllable way helps resolve challenges in applications from bio imaging to solar cells. Different types of doped semiconductor nanocrystals have been designed and prepared from various synthetic routes that usually exhibit some unique features.

The critical role that dopants play in semiconductor devices has stimulated research on the properties and the potential applications of semiconductor nanocrystals, or colloidal quantum dots, doped with intentional impurities. Impurities can be used to alter the properties of nanoscale materials in desirable and controllable ways, doped nanocrystals can address key problems in applications from solar cells to bioimaging.



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THE DNA CODE



All instruction, all teaching, all training comes with intent. Someone who writes an instruction manual does so with purpose. In every cell of our bodies there exist a very detailed instruction code, much like a miniature computer programme. A computer programme is made up of ones and zeros, like this: 1100101011000. The way they are

arranged tell the computer programme what to do. The DNA code in each of our cells is very similar. It's made up of four chemicals that scientists abbreviate as A, T, G, and C. These are arranged in the human cell like this: CGTGTGACTCGCTCCTGAT and so on. There are three billion of these letters in every human cell!!

We can programme our phone to beep for specific reasons, DNA instructs the cell. DNA is a three-billion-lettered programme telling the cell to act in a certain way. It is a full instruction manual. These are not just chemicals. These are chemicals that instruct, that code in a very detailed way exactly how the person's body should develop. Natural, biological causes are completely lacking as an explanation when programmed information is involved. You cannot find instruction, precise information like this, without someone intentionally constructing it.

Ms. Priyanka Sharma
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IMPORTANCE OF FEM FOR TODAY'S MECHANICAL ENGINEER

INTRODUCTION

FEM techniques are useful to get solution of differential and integral equations having complex geometries of real world. With the help of this technique real complex problems are now solvable without any experimental work. The method essentially consists of assuming the piecewise continuous functions for the problem solution and obtaining the final parameters of the functions in a manner that reduces the error in the analytical solution.

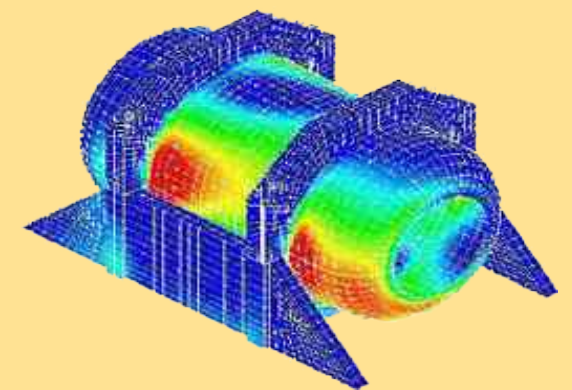
FEM technique is useful for various fields which are following:

- Mechanical/Aerospace/Civil/Automotive Engineering
- Structural/Stress Analysis
 - Static/Dynamic
 - Linear/Nonlinear
- Fluid Flow
- Heat Transfer
- Electromagnetic Fields
- Soil Mechanics
- Acoustics
- Biomechanics

In FEM technique Discretization is very common word and its meaning is "Model body by dividing it into an equivalent system of many smaller bodies or units (finite elements) interconnected at points common to two or more elements (nodes or nodal points) and/or boundary lines and/or surfaces".

There are various advantages in FEM technique which are following:

- Irregular Boundaries
- General Loads
- Different Materials
- Boundary Conditions



- Variable Element Size
- Easy Modification
- Nonlinear Problems (Geometric or Material)

PRINCIPLES OF FEM TECHNIQUE:

The finite element method (FEM) or finite element analysis (FEA) is a computational technique used to obtain approximate perfect solutions of boundary value problems in engineering fields. Boundary value problems are also called field problems. The field is the domain of interest and most often represents a physical structure. The field variables are the dependent variables of interest governed by the differential equation. The boundary conditions are the specified values of the field variables (or related variables such as derivatives) on the boundaries of the field. The primary characteristics of a finite element are embodied in the element stiffness matrix. For a structural finite element, the stiffness matrix contains the geometric and material behaviour information that indicates the resistance of the element to deformation when subjected to loading. Such deformation may include axial, bending, shear, and torsional effects. For finite elements used in non-structural analyses, such as fluid flow and heat transfer, the term stiffness matrix is also used, since the matrix represents the resistance of the element to change when subjected to external influences.

Ms. Suman Anand
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ENERGY EFFICIENT USE OF LIGHTING

“Tube light” – It is very familiar to everyone and can be noticed almost everywhere in houses, offices, hospitals, etc. It is interesting to note that there are three different types of tube lights. They are T12, T8 and T5 tube lights. Let us see, how they differ from each other and which is better by comparing some key parameters like cost, energy consumption, durability, performance, pleasantness of the light and the affect on environment.

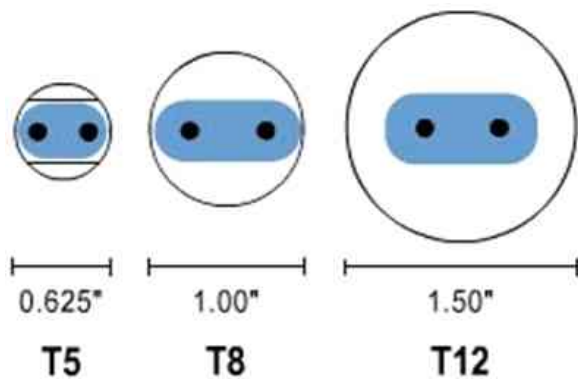
Dimensions

Before we look into differences in their dimensions, let us first understand what do the codes T12, T8 and T5 mean. “T” means tubular (structure of the bulb) and the numbers 12, 8, 5 means the diameter of the tube light measured in 1/8th inch.

The most common type of fluorescent lamp is tubular and linear in shape. There are three generations of linear tubular fluorescent lamps:



The diameter for T5 is: $(5/8) \times 25.4 = 16$ mm
 The diameter for T8 is: $(8/8) \times 25.4 = 25.4$ mm
 The diameter for T12 is: $(12/8) \times 25.4 = 38.1$ mm



	T12 (regular)	T8 (thin)	T5 (ultra thin)
Diameter (inches)	1.5	5	0.62
Length (inches)	48	48	45.2
Initial cost in Rs.	40	48	140
Energy consumed in Watt	40	36	28
Durability (in hours)	10,000	10,000	15,000
Lumens per watt	78	92	103
Colour of light	62 CRI	85CRI	85CRI
Mercury content	21 mg	10 mg	6 mg

Annual lighting cost comparison			
Chart: 50 fixtures * 7 rupees per kWh * 12 hours per day			
	T12	T8	T5
Watt	40	36	28
Tube lights	2	2	2
Fixtures	50	50	50
Total Watts	4000	3600	2800
Hours/day	12	12	12
Days/week	5	5	5
Weeks	52	52	52
Total Hours	3120	3120	3120
Annual cost (in Rupees)	87360	78624	56784
Saving vs. T12	0.0%	10%	35%

CONCLUSION

Among the three, T12 are inefficient. So, there is no point in comparing it with T8s and T5s. And, with little extra performance, T5 tube are way too expensive than T8 tube light. So, T8s are economical than T5s. And, it is better to dispose tube lights after 6,000 burning hours because it contains mercury; with light rays, it may cause skin rashes. So, it is better to dispose them and dispose them carefully without breaking and getting into direct contact with the mercury in the tube light.

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THERMAL PAPER

Thermal paper is a special fine paper that is coated with a chemical that changes colour when exposed to heat. It is used in thermal printers and particularly in inexpensive or lightweight devices such as adding machines, cash registers, and ATM. The surface of the paper is coated with a solid-state mixture of a dye and a suitable matrix. When the matrix is heated above its melting point, the dye reacts with the acid, shifts to its coloured form, and the changed form is then conserved in a metastable state when the matrix solidifies back quickly enough.

Usually, the coating will turn black when heated, but coatings that turn blue or red are sometimes used. While an open heat source, such as a flame, can discolour the paper, a fingernail swiped quickly across the paper will also generate enough heat from friction to produce a mark.

Chemistry: Four different types of imaging chemicals are used in thermally sensitive papers: leuco dyes, developers, sensitizers and stabilizers.

• Leuco Dyes

The leuco dyes used in direct thermal paper are usually triaryl methane phthalide dyes, such as Yamamoto Blue 4450, or fluoran dyes, such as Pergascript Black 2C. These dyes have a colourless leuco form when crystalline or when in a pH neutral environment, but become coloured when dissolved in a melt and exposed to an acidic environment.

• Developers

Leuco dyes, in general, provide little colour when melted unless they are melted in conjunction with one or more organic acids. Examples of organic acids suitable for thermochromic papers are phenols such as Bisphenol A and Bisphenol S.

• Sensitizers

A leuco dye and a developer, when melted together, are enough to produce colour. However, the thermal threshold of the coated layer containing the colourizing components is determined by the lowest melting component of the layer. Furthermore, developers and leuco dyes often mix poorly upon melting. To optimize the colourization temperature and to facilitate mixing, a third chemical called a sensitizer is commonly added to the imaging layer. Sensitizers are commonly simple ether molecules such as 1,2-bis-(3-methylphenoxy)ethane or 2-benzyloxynaphthalene. These two materials melt at approximately 100C, which is a practical lower limit for thermal coloration. These low-cost ethers are excellent low viscosity solvents for leuco dyes and developers.

• Stabilizers

Dyes in thermally sensitive paper are often unstable and return to their original colourless, crystalline forms when stored in hot or humid conditions. To stabilize the metastable glass formed by the leuco dye, developer and sensitizer, a fourth type of material called a stabilizer is often added to thermal papers. Stabilizers often share similarities with developers and are often complex multifunctional phenols that inhibit recrystallization of the dye and developer, thereby stabilizing the printed image.



Health and environmental concerns:

1. Thermal cash receipt with text "produced without any phenol chemistry" should be used.
2. Some thermal papers are coated with BPA, a chemical considered to be an endocrine disrupter. This material can contaminate recycled paper. BPA can transfer readily to the skin in small amounts.
3. When taking hold of a receipt consisting of thermal printing paper for five seconds, roughly 1 µg BPA (0.2–0.6 µg) was transferred to the forefinger and the middle finger if the skin was rather dry, and about ten times more than this if these fingers were wet or very greasy.
4. Bisphenol A, or BPA, is a chemical found in the thermal paper idely used in receipts from cash registers and in some plastics and resins, and can pass through human skin and can cause skin cancer.
5. BPA is a chemical which is known to minimise the effects of estrogen. Pregnant women and babies should minimize their exposure to BPA, which is commonly found in babies bottles.

Mr. Sunil Kumar
Lecturer, Dept. of ME

Don't Quit

*When things go wrong as they sometimes will;
 When the road you're trudging seems all uphill;
 When the funds are low, and the debts are high;
 And you want to smile, but you have to sigh;
 When care is pressing you down a bit;
 Rest if you must, but don't you quit.
 Success is failure turned inside out;
 The silver tint of the clouds of doubt;
 And you can never tell how close you are;
 It may be near when it seems afar.
 So, stick to the fight when you're hardest hit
 It's when things go wrong that you mustn't quit.*

Ashok Kumar Sharma, I B. Tech., Dept. of IT

MORAL VALUES IN EDUCATION

A person without moral values is just like a body without soul. Moral values teach us to distinguish between right and wrong. They develop the feeling of humanity, truthfulness, courtesy, tolerance, fraternity and compassion. Bookish knowledge only makes us literate not educated. In today's education system students are taught only how to earn money. And people think that minting money is the only aim of life. They become atheists having no feeling of equality and cooperation. They hallucinate that wealth is the secret of happiness. This leads a sharp rise in the graph of corruption, terrorism, crimes and communalism and consequently the decline of our society and the nation at large. I would like to give the example of Osama Bin Laden, who was an intelligent engineer but was not nurtured with moral values and was unaware of compassion. Finally he became a terrorist. There are people like him in our engineering colleges also. Even in schools, students are involved in inhuman activities.

I would refer to a letter written by Macaulay to his father in

1836. "I have travelled across the length and breadth of India and I have not seen one person who is a beggar, who is a thief. Such wealth I have seen in this country, such high moral values, people of such caliber that I do not think we would ever conquer this country unless we break the very backbone of this nation, which is its spiritual and cultural heritage; and therefore I propose that we replace her old and ancient education system, her culture, so that the Indians think that all that is foreign and English is good and greater than their own then they will lose their self esteem, their native culture, and become what we want them to, a truly dominated nation".

So it is the moral duty of parents and teachers to inculcate moral values in students when they are attaining education. This would strengthen social harmony, encourage cultural development and combat social evils and injustice. This is the only way to create good citizens.

Dr. Meena
Sr. Lecturer, Dept. of Chemistry

VEDIC MATHEMATICS

'Vedic Mathematics' is the name given to the ancient system of mathematics, or, to be precise, a unique technique of calculations based on simple rules and principles, with which any mathematical problem - be it arithmetic, algebra, geometry or trigonometry - can be solved, orally!

Glory of Vedic Mathematics

Vedic Mathematics has originated from the Indian Vedas. These amazing methods are based on the pioneering work of the late Bharati Krishna Tirthaji, Shankaracharya of Puri, Orissa, India. He re-constructed this method in the year 1911-1918. It is said that after Bharati Krishna's original 16 volumes of work expounding the Vedic system were lost, in his final years he wrote this single volume, which was published five years after his death.

Principles

Vedic Mathematics is very original and totally unconventional and provides a new thinking and approach for Mathematical calculations. The system of Vedic Mathematics encourages mental calculations. It helps in understanding of Mathematics and enriches our knowledge of the subject. Its methods come to us as a boon for all competitions. Today's maths requires much effort in learning and to understand. Vedic Maths being most natural way of working can be learnt and mastered with very little efforts and in very short time. It also provides a system of checking the calculations and getting the correct results. If we make the habit of applying the simple and quick checks at different stages of working, we

move on confidently, and keep on smiling at every stage, after confirming the correctness of work. The system of Vedic Mathematics has elements of choice and flexibility at each stage helps in keeping the mind alive and alert.

Sutras: Natural Formulae

The system is based on 16 Vedic sutras or aphorisms, which are actually word-formulae describing natural ways of solving a whole range of mathematical problems. Some examples of sutras are "By one more than the one before", "All from 9 & the last from 10", and "Vertically & Crosswise". These 16 one-line formulae originally written in Sanskrit, which can be easily memorized, enables one to solve long mathematical problems quickly.

Gymnasium for mind

Vedic Mathematics is the source of actual Mathematics that we are studying today. It equips us with mental one-line formulae which speed up calculations by more than 10 to 15 times. The system of Vedic Mathematics improves calculation power and is much more simplified, systematic and accurate. In Vedic Mathematics we use both left and right brain hemisphere. The left side of the brain is responsible for languages and works in logical and sequential order while the right side of the brain is more visual hence increases concentration and boost memory. Students perform calculations without the use of pen and paper hence there is a massive increase in the concentration. Students, competitive exam aspirants, Engineers, Professionals, Teachers, Executives, Parents and even Business person can derive benefits from Vedic

Mathematics.

Try These Out!

- If you want to find the square of 45, you can employ the Ekadhikena Purvena sutra ("By one more than the one before"). The rule says since the first digit is 4 and the second one is 5, you will first have to multiply 4 (4 + 1), that is 4 X 5, which is equal to 20 and then multiply 5 with 5, which is 25. Viola! The answer is 2025. Now, you can employ this method to multiply all numbers ending with 5.
- If you want to subtract 4679 from 10000, you can easily apply the Nikhilam Navatashcaramam Dashatah sutra ("All from 9 and the last from 10"). Each figure in 4679 is subtracted from 9 and the last figure is subtracted from 10, yielding 5321. Similarly, other sutras lay down such simple rules of calculation.

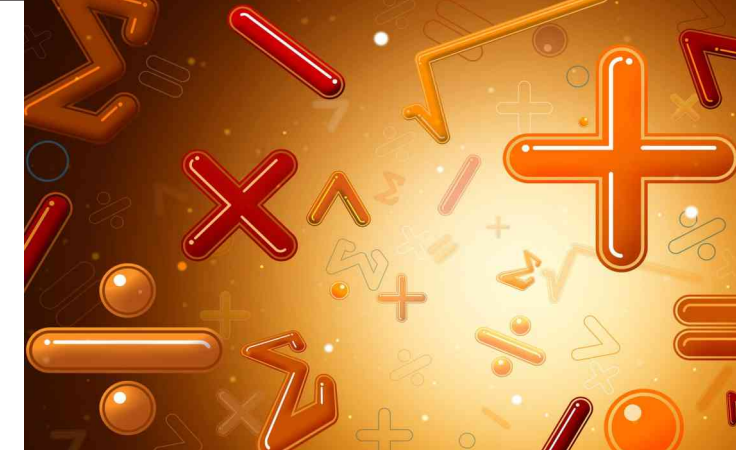
Applications

- Marks Improvement & Competitive Skill Development Tool for middle & high School students: Once a student enters into the middle school level the dynamics and priority changes. Here the students have more to read and more things to concentrate upon. In this scenario he wants to do everything fast so that he can achieve more in less time. Due to this he commits silly mistakes. This becomes more pronounced because he does not have a tool, which can help him in verifying his answer. Vedic Mathematics provides him a tool where he can verify his answer without rework. (multiplication, division, squares, cubes, square root, cube root included).
- Business Negotiations/ Sales: A business contract can be won time if you can provide a good deal without taking a lot of time and mind if you cannot always resort to calculator.
- Maths Teachers: It acts as an added qualification for Maths Teachers and proves to be a very strong tool for getting a job.
- Share Brokers: Share brokers can calculate their margins very fast using Vedic Mathematics.
- Cryptography: This technology is used by almost everybody who hold e-mail account, net-banking account, ATM cards, credit cards, debit cards etc. When you enter your secret pin into

BUSINESS ETHICS

Business Ethics (Corporate ethics) is a form of applied ethics or Professional ethics that examines ethical principles and moral or ethical problems that arise in a business environment. It applies to all aspects of business conduct and is relevant to the conduct of individuals and entire organizations.

Business ethics has both normative and descriptive dimensions. The range and quantity of business ethical issues reflect the interaction of profit-maximizing behaviour with non-economic concerns. Interest in business ethics accelerated dramatically during 1980 and 1990, both within major corporations and within academia. For example, today most major corporations promote their commitment to non-economic values under headings such as ethics codes and social responsibility charters. Adam Smith said, "People of the same trade seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the



the ATM machine or on the net it takes a minimum of 300 milliseconds to respond back. This time can be reduced if we start using Vedic Mathematics in this arena.

- Computer Science: Artificial Intelligence: Artificial Intelligence (AI) is the area of computer science focusing on creating machines that can engage on behaviors that humans consider intelligent. ... NASA is working in this direction.
- Chip Design: Chip designed around Vedic Mathematics may allow computers to run faster. People have taken note of the power of Vedic Mathematics and few computer engineers are trying to work on this agenda.
- Bio-Chemistry: Working out molecular structure of an item takes very long time, some time it goes into several years (10 - 11 years). Software based on Vedic Mathematics can reduce this time frame to 1 to 2 years.

Teaching Vedic Mathematics to children can introduce a high degree of mathematical ability from an early age because of its simplicity and ease. Mathematics is the head of all sciences and if it is taught with fun and ease one can cultivate an interest towards the subject. The best part of Vedic Maths is that it stimulates the brain to encourage calculations of a high order without the use of calculator or any other instrument.

Dr. Sangeeta Gupta
Reader, Dept. of Mathematics



INTERPERSONAL CATALOGUE OF JAIPUR

Influenced by the internet phenomenon humans of New York, two engineering students, Navpreet Singh (BIT) and Kartik Gorana (MNIT) started a page, Humans of Jaipur City, capturing the lives of people they meet randomly on the streets of Jaipur. HONY aims to "provide a worldwide audience with daily glimpses into the lives of strangers on the streets of New York City". Navpreet and Kartik noticed that among Indian cities, a page like this existed only for Delhi and Mumbai.

But it wasn't the easiest project to take up. Navpreet explains, "It was very difficult in the beginning. We didn't know how to talk to people, we didn't know what to ask them, we didn't even know if they would be interested in talking to us. We started with the Central Park, and on day one, we were just walking when we decided to approach a stranger. We must have had a 10-minute discussion between ourselves before actually talking to him, because we were so nervous. We got better, of course, but there are still times when people refuse to talk to us. A lot of people in Jaipur aren't tech-savvy. It's not like Delhi or Mumbai, and it's definitely not New York. But as our page got more popular, people started approaching us on their own."

"The first post that made the page really popular in the beginning, says Navpreet, was about a man's journey towards starting his own restaurant in the city. Humans of Jaipur City has over 1,300 likes now & the page has become popular. So, we feel a certain sense of responsibility. It's not like tomorrow we can wake up and say, 'oh, we have no update'. There are people who follow the page, and that wouldn't be OK." "We believe that everyone has a story, and we're here to unleash it. And Jaipur is growing so rapidly, it's not the same city it used to be. There are many people doing many remarkable things that it's very interesting to feature them on our page.

Now, Jaipur too has a voice in the form of Humans of Jaipur City.

Tanvi Arora
IV B.Tech., Dept. of ECE

SHARPEN YOUR AXE

A person named John had been working as a wood cutter in a company for five years. Unfortunately, he never got promoted. Instead the company employed another person Bill and he got promoted within an year. John opposed this and went to discuss this with his boss. The boss answered, "You still cut the same number of trees as you did earlier. Our company believes in result. If you improve your performance, we will be happy to increase your salary." John went back and did his work more efficiently, still he could not cut more trees. He discussed his problem with his boss who advised him to talk to Bill. He said, "May be he knows something you don't know." John went to Bill and asked him, "How do you cut more trees working for the same period of time as I do?" Bill answered "After cutting every tree, I stop my work for some time and sharpen my axe."

Vandana Chotiya
I B.Tech., Dept. of ECE

JUSTICE TO THE FAIRER SEX

In the Indian Society, a girl is epitomised as Goddess Laxmi, Saraswati, Durga and so on.... But do the people really value that? Are parents really craving to have a girl child?? Being a girl is a wonderful experience. It feels great on part of a girl to get pampered, loved and adored. A bit sensitive by heart, she knows how to carry family responsibility effectively. She knows how to make people happy as she can read the subtle changes in people's emotions.

Sure, some boys don't get that about a girl or a woman; but how on earth do they get to a place where they can actually hurt her? About three - fourths of women are a victim of constant ogling, gazing and teasing. She can't wear short dresses, be out late night, just because something wrong might happen to her.

The most unfortunate part is that most of the offenders are known to the rape victims. Kids aging 4-5 years whose mind is too tender to understand the difference between a good touch and a bad touch are raped too. Cases of assault, either small or big, should be readily reported by women. A basic sense of respect should be instilled amongst the boys too.

*A girl is God's amazing creations;
she is a concerned mother, a caring wife,
a sweet daughter and a charming lover.
Let the fairer sex enjoy their liberty.
Let the essence of a girl not fade away.*

Tanu Shri Pant
I B.Tech., Dept. of CS

A JOURNEY: OH! SO PRETTY

I wish my words could flow as my thoughts are flowing in my deep mind. The shades of the sky have an overwhelming effect on me. I wish I could colour myself in these beautiful natural shades of clouds blended with the colour of the setting sun at the twilight. The nature is bountiful & boundless with splendid beauty. I wish I could just save them in my mind and whenever I felt like rejuvenating myself after a low day, I could close my eye lids and visualize the most amazing views I have experienced in my life till date, in a flash! The shattered pattern of the clouds with a deep blue colour touching the peaks of green mountains (but the green lost in the evening darkness) has a mesmerizing influence on me. It energizes me thoroughly. I have finally joined a new institute and it is my first visit to my home in Gurgaon after staying far away for fifteen days.

The NH-8 with the amazingly built road with no tedious bumps but a flat one. Choti-choti pyaari-pyaari activities going on the road side thrilled me. It was like a horn bill riding on buffalo's back as if it's THE KING, or the cartload of monkeys relishing their family time with new generation babes and some of them snatching bananas from the fruit vendors; lovely songs tickling in my ears; and the most important point, trying to store in god's creative art. I mean, his creativity on mountain ranges with huge lush green meadows in the front and cows grazing the grass, birds soaring high in the sky flying across the mountain summit, the last warmth and light of the big orange ball i.e. the sun, kissing the peaks and the dark blue sky with a tinge of orange shade at these unblemished pieces of art I cannot

express! While everything was passing through my eyes these thoughts and words were running across my mind, and I was feeling like catching them up before they leave my mind empty, because it is next to impossible for me to choose between my thoughts and the lucrative views I would miss in case I would have jotted them down at that moment. You know, I have just waited for the sun to set so that I could pen everything down. This was a beautiful journey I experienced all alone. This journey was a unique one.

Kanishka Joshi
I B.Tech., Dept. of CS

CHEER UP, YOU FIDGETY FOOL.

When will these problems end? What shall I do now? When shall I be free from tension? Questions like these surely come up in each and every mind. We get panicky with our unsolved problems. This sometime leads to unexpected even horrible results. What is tension? There is no single type or reason for it. Every guy feels it for his own reason. A poor person, who is hungry and starving, is tense for food and clothes. A middle class man is in tension due to his status and hectic routine. He wants to be rich but where does richness begin? On the other hand, a rich man is worried about his wealth. He is afraid lest somebody should kidnap his relatives and demand a ransom. Security of his family and money makes him tense. Tension can be felt by a little boy as well as an old man. Inexperienced people believe they suffer from stress.

What is the solution of it all? Many gurus and experts claim to free from tension through their methods. Stress management theories exist to help out those who are suffering. But what about a little poor boy on the road? What does he feel about these experts and gurus? The answer is there is no external solution of strains. That way you can only resolve them for a while; later on they will appear in a different form. Seen this way no tension is too big. It only increases your internal strength. Like a strong man is not worried about fighting with scoundrels. But with a family man, business will be afraid in such conditions.

We need to strengthen ourselves; if we fear our problems we will be nervous. Once you solve a problem, it vanishes forever. But you have to find the solution of these problems within you. What you should do is this; rise above pretty strains. Do not let them disturb your mind. Causes of worries are not going to disappear, but if you lift yourself above them, you will have tackled them.

What about your decisions? Mahatma Gandhi said, "Whenever you are in doubt or when the self becomes too much with you, apply the following test: Recall the face of the poorest and the weakest man whom you may have seen, and ask yourself if the step you contemplate is going to be of any use to him. Will he gain anything by it? Will it restore him to a control over his own life and destiny? In other words, will it lead to Swaraj for the hungry and spiritually starving millions? Then you will find your doubts in yourself melting away." So, managing stress is all about taking charge: of your thoughts, emotions, schedule, and the way you deal with problems.

Mr. Dinesh Kumar Sharma
Lecturer, Dept. of ME

THE POWER CONNOTATIONS

It's the unspoken truth of humanity that human beings crave for power. The whole human history revolves around the lust for power and supremacy. Dynasties have flourished and have perished over the ages around the equation of power. Our human history is decorated with tales of powerful kings and rulers. Even today the underlying principle of our socio-political exchanges revolves around seeking power. Our interpersonal relations are also inclined towards powerful persons.

Seeking power is an insatiable desire that makes people mad. History bears testimony to the fact that kings became drunk with power and forged their own decline. Alexander the great, world's greatest conqueror became oblivious of everything except power in this world. Whenever the love for power has become the lust for power it has paved way for a new revolution or regeneration. In France in 1789, when Louis XVI started misusing his authority, people dethroned him. Both the world wars were minor disputes that aggravated into world wars, because of some ambitious men who saw this as an opportunity of expanding their own personal power and supremacy.

Even today, all our international relations are governed by power and authority on a global scale. Why do all the countries fawn on the United States so much? Because it is a blatant truth that nations fear its commanding military and economic power. It's a fact that we all fear the repercussions of an unnecessary quarrel with the powerful. But it is this subdued voice against the powerful that leads to misuse of power. In our country today 49% of the powerful positions are occupied by the corrupt people. Power and corruption are two words that have become identical. The question remains whether power corrupts people or people corrupt power? What happens to ordinary people like us when they yield that power? The problem lies in our cowardice and selfish nature. We are all enraged by the atrocities committed by our system. We feel helpless and lack that weapon of power with which we can jump into this war against corruption. But we forget the purpose of our power. It is sad that most people seek power for revenge and not for change and betterment of the society. The real vices and virtues of a man are expounded when he is given power.

On the interpersonal level too people tend to behave abjectly in front of a person with power. We deplete our own self-respect and self-esteem. The most common way in which people give up their power is by thinking that they do not have any. Every man and woman on this earth is powerful. We all possess our own natural incandescence which can enlighten us. The problem is we remain illuminated by the gleam of other lamps around us and fail to recognize our own aura. You are your own motivation. Earning money is very easy but earning a respectable position in society is very difficult. So recognize your own dormant power sources and revitalize them. Do not strive for a living, strive for a life-A KING SIZED LIFE.

*"I seek not money, I seek not love
I seek no fortune, I just seek that one thing
That power which makes me a KING."*

Nivedita Jha
III B.Tech., Dept. of ECE

बूँद

कल, इक बूँद, मेरी हथेली पर आई
बोली "देख, मैं कितने सपने हूँ लाई"
बूँद ने फिर कुछ मंत्र पढ़ा, कहा "अब गौर से देख जरा
मुझमें दिखते हैं इन्द्रधनुष, इन रंगों को अब देख जरा"

सात ही रंग नहीं थे वो, अनगिनत रंगों का दरिया था
कहीं आसमानी परी सा था, कहीं रक्तिम, केंसरिया था
इन रंगों से तू सजा ले अब, वो तस्वीरें जो रची नहीं
इन रंगों को अपना ले तू, मुझमें रंगों की कमी नहीं
इन रंगों के सागर में खो जा, देख कहीं कोई गम ही नहीं
कमी है गाने वाले की, क्यूँ कहती है सरगम नहीं।

जिस सुर में चाहे गा ले तू, तेरा अपना ही सुर होगा
जितना डूबेगी सुर में तू, तेरा गीत अमर, मधुर होगा
ले देख...पे रंग, ये सुर भी मिले, इक नया सिलसिला बन ही गया
तू मुझको बूँद समझती है, मैं एक जलजला बन ही गया
मैंने देखा उस बूँद में फिर हर नद सागर को समाते हुए
मैंने देखा उस बूँद में फिर, सुर के रंगों में नहाते हुये
बोली "वही हूँ मैं, इक नहीं सी, अब विराट में धुल के विराट हुई
जब स्वाति सा नक्षत्र मिला, मैं ही सीमित हो मोती हुई
यकायक आँख से ओझल हो, वो जाने एकदम कहाँ गई?
मैं यहाँ, वहाँ अब खोजूँ कहाँ, मेरी बूँद वो गुम अब कहाँ हुई?
तभी इठलाती सी, चंचल सी बोली 'सुन मैं हूँ बादल में
मैं ही घुल जाती हूँ पगली, तेरी आँख के बहते काजल में'

मैं बोली 'तू छलना है, मुझको आकर ठगती क्यूँ है?
मैं पहले ही हूँ ठगी, गिरी, अब मुझको बहलाती क्यूँ है?
मैं अपनी ही बरबादी हूँ, अपना ही शोक मनाती हूँ
ना ही मुझमें कोई मोती है, नाही मैं कोई स्वाति हूँ'
वो बोला-'पगली, देख मुझे, मैं तेरी ही आँखों का स्वाति हूँ'
तू चाहे तो मुझको बूँद बना, चाहे तो मोती बना मुझको
मैं तेरा खोया सपना हूँ, अब तो तू अपना ले मुझको
अब तो तू अपना ले मुझको.....

डॉ. कृष्णा दयाल शर्मा, व्याख्याता, अंग्रेजी विभाग

ये कैसी दुनिया बाकी है?

स्याह फन फैलाए नाग हर ओर भिड़े है। कुछ बेरहमी से
डसते है, कुछ डसने को तैयार छिपे है।
जहर सी काली सोच और उस से भी काला मन है
दिखती नहीं देह में जान, इन्हें दिखता केवल तन है।
कुछ कर्मों से, कुछ बातों से, आँखों से ही डसते है।
विष फैला कर ये मानव सर्प बेखौप से हो कर हँसते है।
इन बेहद नीच दरिंदों का हवसे के सिवा कोई इमान नहीं
ये कैसी दुनिया बाकी है जहाँ जननी का सम्मान नहीं?

हितेश चाहर, द्वितीय वर्ष, विद्युतीय अभियांत्रिकी

अदल - बदल

कुछ नरक-स्वर्ग मुझे, और कुछ तुझे मिला है,
आ बदल लें अपने स्वर्ग, विधाता ने जो दिया है।
मैं भी देख लूँ कुछ ज्यादा, जो था तेरे हिस्से में,
यूँ बदल जायेगा मेरा-तेरा स्वर्ग, तेरे-मेरे स्वर्गों में।
हर तरफ चलने लगे ये ही सिलसिला,
तो क्यो हो कोई चेहरा मायूसी भरा
पर आसान नहीं बदल लेना यूँ इक दूजे का आसमान,
हममें कई है, जो चाहते ही नहीं, पूरे हों दूसरों के अरमान।
हो तो जायेगी हर तरफ सावन सी हरियाली,
बशर्ते मैं और तू पहचानें अपनी-अपनी कंगाली।
खुदा जानता था लोगों की ऐसी होशियारी
तभी तो ऐसी गूँथी दोनों दुनिया और दे डाली।
फिर ना कर पायेंगे इसे अलग-अलग,
और सब होते हुए भी रोएंगे अलग-अलग।

डॉ. प्रमिला कुमावत, व्याख्याता, गणित विभाग

एक अंकल्प : पर्यावरण की रक्षा

उठकर प्रातःकाल में, जब बाहर खिड़की से देखती हूँ।
वातावरण बाहर का, दुःखित मन ही मन रोती हूँ।।
देख कर दशा पक्षियों और पेड़ों की मन मेरा रो पड़ता है।
सोच सोच कर कर उनके बारे में कुछ करने का मन करता है।।
वो ही तो है जो वातावरण का ध्यान बखूबी रखते है।
साथ ही साथ अत्याचार हमारे भी तो सहते है।।
वैसे तो बना रखे बड़े नियम सरकार ने इनकी रक्षा के।
बावजूद इसके वो बन जाते है शिकार हमारी इच्छा के।।
चाह कर के भी बस ना सरकार का इस पर चलता है।
इनका तो सारा जीवन, संशय मे ही कटता है।।
तोड़ दिये जाते घर इनके, अपने घर बनाने को।।
मजबूर हो उठते है वो, उस जगह को छोड़ जाने को।।
काट-काट के पेड़, मुसीबत इन्हें हम देते है।
साथ ही साथ वातावरण दूषित भी कर देते है।।
भूल जाते है वादे अपने जो हमने प्रकृति से है किये।
और गर्वित हो उठते है कि शिकार हमने किये।।
चाह कर के भी प्रायश्चित इस पाप का हम नहीं कर सकते।
प्रायश्चित इसका करने में, हमें जन्म-जन्म है लग सकते।।
छोड़ो शिकार, बढ़ो आगे, करो कुछ इन मासूमों के लिये।
जो निरन्तर लगे ही रहते है हम सब की सेवा के लिये।।
सब करलो अपने आप से वादा, पेड़ ना एक हम काटेंगे।
पड़ा काटना अगर हमें तो, दो पेड़ तभी लगायेंगे।।

प्रीती, द्वितीय वर्ष, सूचना एवं प्रौद्योगिकी अभियांत्रिकी

SKIT में एडमिशन ठमाना

सपना था NIT का हमारा सोच के ALLEN में कोंचिंग हमारा
KOTA में गुजरा साल भर हमारा फिर भी मिला नहीं सपनों का NIT हमारा।
जाना घर पर उदास होकर हमारा ध्यान में रखना पारिवारिक स्थिति हमारा
सही कहना भईया जी का हमारा, NIT सही नहीं तो सही RPET बेचारा
कोटा वापस आना हमारा, कोल्ड ड्रिंक का पीना हमारा
डर के आगे जीत का नारा, पुनः करना गाड़ी का स्टार्ट हमारा।
सपना बनाया RPET के दुबारा, महीने भर का TARGET हमारा
दिन रात की मेहनत करना हमारा, भगवान की आवाज का सुनना हमारा
और बोले सपना पड़ा है SKIT मे तुम्हारा।
जयपुर को शत शत प्रणाम SKIT में एडमिशन हमारा
इंजीनियारिंग का सपना हमारा SKIT ने अभिवादन स्वीकारा।

जितेन्द्र सिंह राठौड़, द्वितीय वर्ष, सिविल अभियांत्रिकी

मैं और मेरी जिन्दगी

अस्थिर मन, गतिमान समय, सबको लेकर चलता हूँ साथ मैं,
देख दुनिया के रिवाज अनोखे, नित नव सीख पाता हूँ मैं,
अजीब लगे, अनियमित हो चले कभी...
बनकर बिखरती है, फिर संभल जाती है मेरी जिन्दगी...
रुक कर चलता हूँ सोच कर बढ़ता हूँ,
बंदिशों को थामे, साँचे में ढलता हूँ,
पत्थर संग संघर्ष कर पर्वत पार करता हूँ,
कठोर तो है पर आशान्वित है मेरी जिंदगी...
क्यों ना मैं भी, हवा बन बह जाऊँ यूँ ही,
अभेद, अनदेखा सा आसमान में खो जाऊँ कहीं,
ख्वाब कुछ अधूरे जैसे पूरे होना चाहे,
बिखरा हुआ अतः अब मंजिल को पाना चाहे...
उड़ान संग परिंदों की एक कल्पना है मेरी जिंदगी

उदय भानू सिंह खिची, द्वितीय वर्ष, सिविल अभियांत्रिकी

मौसम से कछे, फिन आना

गर्मियाँ आ गई है। कुछ दिन रहेंगी अभी। हर मौसम मेहमान की तरह आता है, साल
में एक बार अपनी मियाद जितना ठहरता है और चला जाता है। लेकिन
मेहमानवाजी होती देखे कितना समय हो गया है? मोगरे की कलियों से भरे
बगीचे, आम के पड़ों पर कूकती कोयलें, खास के शर्बतों की महफिलें, खटाई
बनती कैरियों की फांको से पटे आँगन, अचार के मसाले की सुगंध, सलू के
सकोरे, मीठे दही के कुल्हड़, खरबूज-तरबूज की रसीली मिठास, आम की बहार,
धनिष्-पुदीने की चटनियाँ, अचार की मुंहबंधी बरनियाँ...करारी कलफ लगी सूती
धोतियाँ, कोटा, तांत की साड़ियाँ, काढ़े हुए दुपट्टे, बेला-चमेली के गजरे...घरों
की खिड़कियों पर लगी भीगी खस की कतारें...
क्या कही देखी आपने? न गर्मियों का उत्सव है न स्वागत।
हर मौसमों से कैसे सीख गए? दुपट्टे कन्धों से उतरकर, मुंह पर बंधने लगे है।
त्वचा पर लेप चढ़ने लगे है कितने दिन बचे है गर्मियों के, या गिनती रोज होने लगी
है। न अमराई है, न मोगरे, न कोयल, न खुशबू, न शरबत, न सलू। हम तो हर
मौसम के बदलाव को माथे से लगाते आए थे। खान-पान, पहनावा, रहन-सहन
सब में तब्दीली करते चलते रहे थे। इसीलिए मौसम पर लानतें नहीं भेजी। सुबह से
ही रसोई महकने लगती, ताजी लौकी, कद्दू बगीचे से कटकर आ जाते, पड़ोसियों
के घर चटनी और ताजी सब्जियों की सौगात जाती, शक्कर से मीठे खरबूजे और
लैला की उंगली-मजनु की पसली की टेर लगा कर ककड़ियाँ बेचने वाले निकलने
लगते, कुल्हड़ बिकते और ग्यारह बजे तक सड़के सूनी हो जाती। छोटी-सी मचिया
पर हाथ-पंखा लेकर बतियाते महिलाओं की दुपहरियाँ बीत जाती। शाम को पीतल
की बाल्टी में भिगोए, ठंडे मीठे छोटे आमों का स्वाद लिया जाता। चुनमुन-सी घंटी
बजाता कुल्फी वाला आता, रात को छत पर खाटें लगती, सूती सफेद चादरो की
ठंडक और देर तक बतियातें ननिहाली-ददिहाली बच्चों की फौज...छुट्टियाँ और
गर्मियों के अद्भुत मेल की यादें बटोरती।
..यह तो शायद देश के दो-तीन इलाकों के किस्से होंगे और जगहों की गर्मियों के
अपने स्वाद और स्वागत होते होंगे। जिसका स्वागत किया ही न जाए, वो मेहमान
मन से कैसे रहेगा? एक ऊब, उकताहट सी छाई रहेगी, सो रहती भी है। हम धरती
से उखड़ गए, आसमान से कट गए, पवन से सिमट गए, तो कुम्हला जाएंगे। सब
कुछ सदाबहार बनाने की क्यो ठान ली है हमने? ऐसे तो एकरसता आएगी।
फिजां बदले, जायके बदले, मन करवटें ले, तो उमंग बदले। चलिए, मौसम के
उत्सव को किसी रंगीन चकरी की तरह लेकर दौड़ है वक्त की दिशा में उल्लास संग
उड़गा। मौसम का रंग जमेगा।

राजदीप सुखवाल, चतुर्थ वर्ष, इलेक्ट्रॉनिक्स एवं संचार अभियांत्रिकी

मुझे चीन्ना है शास्त्र के अनेपन को

मेरे शहर में आज सूनापन है,
हवाओं में नमी और रूखापन है।
किसे बयां करूँ अपने दिल के दर्द को
हर तरफ डर और वहशीपन का कहर है
डरती हूँ मैं भी आज लड़की के इस हाल से
बेबस लाचार मासूम पे हुए अत्याचार से
रो पड़ती हूँ ये आँखें, काँप जाती हूँ मैं
दुआ में लड़कियों पे रहम मांगती हूँ मैं
एक लड़की हूँ तो क्या घर में छुप के बैठ जाऊँ
खुले आम घूम रहे दरिंदो से दूर भाग जाऊँ
कब तक आखिर कब तक मैं शिकार बनती रहूंगी
बचपन में ही दर्द और तिरस्कार सहती रहूंगी
मुझे चीरना है इस शहर के सूनेपन को
उठानी है आवाज बचाना है अपने सम्मान को
मैं भी फिर से शहर की गलियों से खेलना चाहती हूँ
तितली की तरह बेखौफ हवा में उड़ना चाहती हूँ।
विनती है मेरी दुनिया के बन्दों से
मैं हूँ कच्ची कली सी, फूल सा खिलने दो मुझे
देवी माँ का रूप हूँ मैं, पैरों तले ना कुचलो मुझे
मत छीनो मुझसे मेरे बचपन की खुशियाँ
जिन्दगी जीने दो मुझे पाक गुड़िया की तरह।

नेहा कपूर, व्याख्याता, कम्प्यूटर अभियांत्रिकी

कलानी बदलते भारत की

आपको एक बात बताता हूँ, अपने भारत देश की बात सुनाता हूँ,
अपनी कमजोरी से आपको अवगत कराता हूँ।
हमारा देश खड़ा है मजदूरी की घाटियों में,
बर्बाद हो रहा है बचपन, बाल शादियों में,
आधुनिक युग में भी देश खड़ा है निरक्षरता की पहिण्डियों पे,
जिससे घट रहा है लिंग अनुपात इन वादियों में,
लड़कियों की मौत हो रही है अस्पताल के गलियारों में,
और लड़कों की खुशी मनाई जा रही है
ढोल धालियों की खनमारों में,
लड़कियाँ खुद को लड़कों से आगे बता रही है
हर परीक्षा के परिणामों में,
फिर भी वे बोझ समझी जा रही है घर परिवारों में,
कुछ डॉक्टर भूल गए हैं अपनी मर्यादा को,
कर रहे हैं भ्रूण हत्या, बेच अपने इमानों को,
स्त्री ही खत्म कर रही है अपने अंश को,
वंश के चक्कर में पछाड़ रही है कंश को।
क्या हो गया है देश के जनमानस को,
क्यों कर रहे हैं निर्ममता के कर्म को,
अनपढ़ ही नहीं पढ़े लिखे भी कर रहे हैं इस कुकर्म को।
दोस्तों अब हमें आगे बढ़ना होगा करने सुकर्म को,
हमारी बुद्धि को करना होगा मजबूर सही दिशा में सोचने को,
पुरानी कुरीतियों से हमें बाहर निकलना होगा
झकझोर के अपने दिल को,
ताकि आगे बढ़ सकें देश, छोड़ इन रूढ़ीवादी नीतियों को,
और नवनिर्मित सोच से मिटाया जा सकें इस कलंको को।

सौरव चौधरी, बी.टेक. चतुर्थ वर्ष, मैकेनिकल अभियांत्रिकी

आजाद हूँ या गुलाम हूँ मैं

आजादी को साल बीते दशक बीते फिर भी ख्वाहिशें अधूरी है,
हौसला है दिल में बदलेंगे सूरत, चाहे मंजिलों से दूरी है।
लहू से सनी धरती पे इक कतरा मेरा भी हो,
छलनी हुए सीनों में एक सीना मेरा भी हो,
हिफाजत को उठे हथियारों में एक हाथ मेरा भी हो,
इस बदलते भारत में एक आजाद सपना मेरा भी हो।
कहने को आजाद हूँ मैं, या तेरे लफ्जों का गुलाम हूँ मैं
हाथों में है हथियार पर चलाने को दिल्ली तेरा गुलाम हूँ मैं
सवाल है आजाद हूँ मैं या गुलाम हूँ मैं
इतिहास मेरे शौर्य की गवाही देगा
सन् 62 में चुभे तीरों को वाणी देगा
तबाही का कोहराम मचेगा, फिर भी थामे तिरंगा
कोई तिरंगे को सलामी देगा,
कोई तिरंगे की सलामी लेगा।
आजादी को साल बीते फिर भी सोच गुलाम है,
नशे में डूबी है जवानी और बातलें आजाद है,
महंगाई की भेंट चढ़ा इंसान पर रूपया आजाद है,
सोचो कौन गुलाम और कौन आजाद है?

सौरभ चौधरी, अंतिम वर्ष, यांत्रिकी अभियांत्रिकी

इज्जत

शोहरतें, उलफतें, मोहब्बतें, सब कुछ है यहाँ, मगर ये इज्जत.....
ये इज्जत क्या है? जो मुझे तुम्हारे लिए मुतासिर करती है।
जब बेबाक तुम चलते हो, जो बेधड़क तुम बोलते हो
क्या ये इज्जत है, जो मुझे तुम्हारे सामने
झुकने की जगह देती है।, ये तुम्हारा होना ही क्यों खुशनुमा सा लगता है
क्या ये तुम्हारा अपने ख्यालों को जाहिर करना इज्जत के काबिल है।
ये इज्जत क्या है ये मैं नहीं जानता
क्या ये तुम हो जो वही हो और मैं मुतासिर हुआ जा रहा हूँ।
ये इज्जत क्या है ये....ये इज्जत क्या है, जो मुझे तुम्हारे लिए मुतासिर करती है।

पराग दोशी, प्रथम वर्ष, इलेक्ट्रॉनिक्स एव संचार अभियांत्रिकी

विद्यार्थी – अमय का पुल

एक शिक्षक को विद्यार्थियों की कई पीढ़ियों को शिक्षित करने का अवसर प्राप्त होता है। विद्यार्थियों का हर समूह बदलते समय को प्रतिबिंबित करता है। भौतिक शास्त्री जॉन आर्किबाल्ड व्हीलर ने कहा है 'विश्वविद्यालयों में केवल विद्यार्थी ही प्रोफेसरो से ज्ञान प्राप्त नहीं करते'। अपने किसी मेंटर के साथ वर्षों काम करने के बाद जब शोधार्थी उसे छोड़कर जाता है तो मिली-जुली भावना सामने आती है। निःसंदेह दोनों ही पक्षों को पी.एच.डी. की जंग जीतने की राहत का एहसास होता है। कृतज्ञ विद्यार्थियों द्वारा दिए गए उपहार मेंटर्स के लिए खजाने से कम नहीं होते। ये खजाने एक शिक्षक के लिए कभी खुशी तो कभी हिम्मत और धैर्य का स्रोत होते हैं विद्यार्थियों की शरारतें, हँसी ठिठोली में शिक्षक सदा अपने समय को तलाशता है और ऐसी ही अनगिनत यादों में खो जाता है। विद्यार्थी शिक्षक को अपने समय से भी अवगत कराते हैं। इसलिए विद्यार्थी समय के एक पुल समान हैं जो वक्त के दो सिरों को जोड़ता है।

तन्वी अरोड़ा, चतुर्थ वर्ष, इलेक्ट्रॉनिक्स एव संचार अभियांत्रिकी

पहेली

मेरा मन भी अजब पहेली है। इसकी तो फितरत ही अलबेली है।
कभी पिछली खटटी मीठी यादों के रस में डुबाये,
कभी गगन से दूर, भविष्य की उड़ानों पर चला जाये।
कभी उलझनों में उलझ कर फँसता रहे,
और कभी बस एक गाने, तराने को गुनगुनाता रहे।
एक ठौर पर रूके ना ये बावरा,
ना जाने किस राधा को ढूँढ रहे है ये साँवरा
नींद में भी अवचेतन बन सपने बुनता रहता है
पता नहीं किन समन्दरों से मोती चुनता रहता है।
कभी जुनूनी बन कठिन लक्ष्य के पीछे पड़ जाये,
कभी सीधी, सरल पगडंडी से भी भटक जाये।
कभी आइन्सटीन की बातों में उलझ पड़े।
गुस्सा, दया, प्यार, खुशी, उदासी है इसके रंग,
बिना होली के ही रंगता है मुझको भी खुद के संग।
मैं तो कहता हूँ ये बहुरूपिया, आवारा है
हमेशा घूमते रहने वाला मलंग बंजारा है।
भागता फिरता है ये छोटा सा दिल,
इसको समझ पाना है बड़ा मुश्किल।
करता हूँ मैं इस पहेली को, खूब बूझने की कोशिश,
पर मुमकिन नहीं खुशबू को रस्सियों में बाँधने की साजिश।

दुष्यंत, प्रथम वर्ष, यांत्रिकी अभियांत्रिकी

माँ

घुटनों से रेंगतें-रेंगतें कब पैरो पर खड़ा हुआ।
न जाने कब तेरी ममता की छाँव मे बड़ा हुआ।
काला-टीका, दूध मलाई आज भी सब कुछ वैसा है।
मैं ही मैं हूँ हर जगह प्यार ये तेरा कैसा है।
सीधा-साधा, भोला-भाला मैं ही सबसे अच्छा हूँ।
कितना भी क्यों न हो जाऊँ बड़ा, 'माँ' मैं आज भी तेरा बच्चा हूँ।
कितना भी क्यों न सताऊँ तुझे, कितना भी क्यों न हो रूलाऊँ तुझे।
मेरे लिए काटती है तू अपने सपने, मेरे लिए काटती है तू अपनी रातें।
सीधा-साधा, भोला-भाला मैं ही सबसे अच्छा हूँ।
कितना भी क्यों न हो जाऊँ बड़ा, 'माँ' मैं आज भी तेरा बच्चा हूँ।

पराग दोशी, प्रथम वर्ष, इलेक्ट्रॉनिक्स एव संचार अभियांत्रिकी

अबजीत को अमर्षित

जब गया वो दहशत के घर में तब तक तो सांसे जिंदा थी
जिस दिन वो घर अपने लौटा तब मौत भी शर्मिंदा थी
बेशक उस खूनी दुनिया से लौटा वो अपने प्यारों में
पर मूँद के आँखे आया वो, सांसे रख ली हत्यारों नें
उस का एक एक जख्म वीरता की गवाही देता था
खामोश साते चेहरे पर बस शौर्य दिखाई देता था
आज धन्य हुई वो माँ जिसने तुझे जैसे वीर सिंह को जन्म दिया
धन्य हुई वो भूमि भी जिसको तूने यों नमन किया
तेरी वीरगति के पथ पर मैं शब्दों के श्रद्धा पुष्प चढ़ाता हूँ
ऐ भारत माँ के लाल तेरे चरणों में शीश झुकाता हूँ।

हितेश चाहर, द्वितीय वर्ष, विद्युतीय अभियांत्रिकी