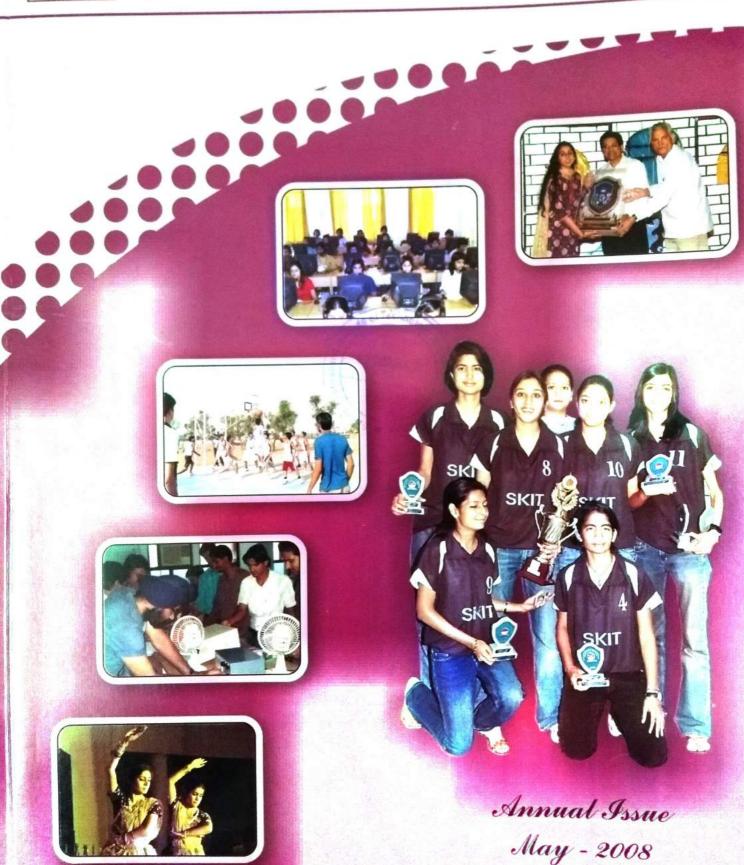
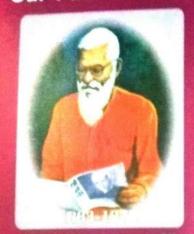


THE SKIT TIMES





Our Path Founder



Our Vision

Swami Keshvanandji

Our Mission

orbjets

SWAMI KESHVANANDJI: A GREAT SAINT EDUCATOR

'Saa Vidya Yaa Vimuktaye,' i.e., education is that liberates. This Vedic principle seems to have been the guiding force behind Swami Keshvanandji's attempts to educate the people and liberate them from the slavery of social evils.

Swamiji himself hardly had any formal education because of his adverse circumstances and social restraints. These very circumstances induced in him an ineffable spiritual quest and to fulfil this he inducted himself into Udasin sect in 1904 on advice of Mahant Kushaldas of the Udasin sect, so that he could learn Sanskrit, in order to be able to study the higher Hindu scriptures from primary sources. Here at the Udasin Sadhu Ashram Fazilka, Punjab, he learnt Hindi and Sanskrit languages, and Devanagari and Gurmukhi scripts.

This was his almost entire education, yet this saint became a great educator. He founded more than 300 schools, 50 hostels and innumerable libraries, social service centers and museums.

In 1911, within a few years of his initiation into the Udasin Dasnami sect as a sanyasi, Swamiji started the "Vedant Pushp Vatika" library within the precincts of the Sadhu Ashram Fazilka. The following year, he started a Sanskrit school at the same place.

In 1932, Swamiji was made director of the Jat School, Sangaria, which was at the verge of closure for want of funds. He went from village to village to collect funds, and was successful in averting the closure of the school, which was renamed Gramothan Vidyapith, Sangaria in 1948. Within the precincts of this school, he developed a museum with a valuable collection of rare documents, paintings and antiques, thus initiating the idea of conservation in a profoundly backward area. This not only has remained a great centre of education, but an epicenter for social reform, as discrimination of any kind is utterly detested here. The students of the school, aided by the local community, undertook a large-scale, successful project to green the precincts of the school, which is located in one of the most arid regions of India. Gramothan Vidyapith, Sangaria has become an inspiration for educators far and wide.

-- Narendra Ku

Lecturer, Dept. of Eng.

mentors' voice



Director's Column

As India moves on with its robust economic growth and indispensable participation in the Global socio-economic progress, the need to create globally adaptable, culturally rooted and well-rounded technocrats becomes all the more essential.

Our commitment to providing conducive and encouraging environment for the growth of quality education, effective industry-academia interface and constructive research was reflected, during this closing session, in the form of a tie-up with IBM through establishment of 'Tivoli Centre of Excellence,' one of its kind in India, on SKIT campus, installation of various new labs like Digital Multimedia Language Laboratory, Environmental Engineering Lab and the upgradation of various existing Labs, and the conduction of National Seminar on 'Energy Sufficient India' and 'AICTE-sponsored Faculty Development Programme.'

All these efforts, on the one hand, ensure enhanced employability of our students, on the other, enable us keep them abreast with the latest global technological advancements, so that SKITians, when join the cerebral capital of the world and expand the frontiers of SKIT across the globe, are in a position to lead the leaders.

With the aim of fulfilling the growing needs of such cerebral capital, SKIT group has launched two new engineering colleges - Vivekananda Institute of Technology and Vivekananda College of Engineering - from this academic year at VIT campus, Jaipur.

Let me end with congratulating all SKITians, on campus and outside, for their conscientious and prompt efforts culminating into this commendable and enviable progress of SKIT.

KABayani.

(K.R. Bagaria)



Principal's Column

Engineering Education is one of the most crucial components of human resource development, having potential for adding value to products and services thereby improving the quality of life. The growth of engineering education after independence has been phenomenal due to both government efforts through successive five year plans and later on

due to private sector participation. Due to increased intake capacity the gross enrollment ratio (GER) has risen from less than 1% in 1950 to about 10% in 2007 but it still compares very poorly with that of US and EU countries.

The biggest challenge, today, before us is to raise the quality standards of our technical education system so that our engineering graduates can efficiently undertake R&D activities. According to industry estimates not more than forty per cent of graduates coming out of our institutions are globally employable. The remaining are either underemployed or unemployed. The industry on the other hand, is facing acute shortage of employable engineering graduates and looking for alternative means of outsourcing and opening units in other countries.

The basic problems which engineering education faces are inadequate and poor quality education due to inadequate and poor quality infrastructure and facilities, a large number of vacant faculty positions as well as inefficient teachers, outmoded teaching methods, declining research standards, and wide spread disparity on the level of geographic location, income, gender and social standards.

The funding pattern of AICTE and MHRD is highly skewed in favour of a handful of central institutions. The bulk of the total number of students are in the state universities and affiliated undergraduate colleges which get practically no central assistance. The expenditure on library, laboratory research and other academic activities is negligible which is very essential for upgrading the quality of technical education.

To raise the standards of engineering education it is essential to attract and retain academically bright people by making teaching a financially attractive profession. At the same time, to keep the technical education within the reach of financially average students, Govt. of India must provide subsidy to all such students on merit basis, irrespective of whether the institution is a government institution or self-financed one. And to enhance its pragmatic meaningfulness, it should be made the country oriented through effective institute-industry interaction. All medium and big industries in industry-savvy engineering graduates who can be directly entrusted with projects work without any pre-project training by industries.

S. L. Surana (Prof. S.L. Surana)

unraveling the treasure

THE SKIT TIMES

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THE WRITTEN WORD

Nature has endowed each one of us with equal creativity, although the channels we use to express it differ from one individual to the other and that's what makes the world so richly beautiful and exquisitely diverse. In spite of being so distinct and different a medium of expression, the 'written word' encompasses the essence of diverse other arts. It borrows rhyme and rhythm from music, picturesqueness from painting, style and form from sculptor, carpentry and other such arts where subtle chiseling of the material is as important to give it a refined shape as is the harmonious wedding of words and sentences in the case of writing. Henry David Thoreau eulogizes it in these words: 'A written word is the choicest of relics. It is something at once more intimate with us and more universal than any other work of art. It is the work of art nearest to life itself. It may be translated into every language, and not only be read but actually breathed from all human lips....'

Writing happens, I say happens because it is involuntary, it cannot be forced. Yet it can be facilitated; can be encouraged and prompted, by one, providing first raw material for it through enriching oneself with diverse experiences, two, allowing the mind freedom to digest and combine these into new compositions by awakening the silence, the very basis of our being and third, which is more a matter of training and so your own addition to it, by chiseling and garnishing it with the garb of form and style.

The invoked and awakened silence of our very self, offers us an opportunity to encounter and thereby comprehend ourselves better. And, since this journey employs all the hidden and revealed recesses of our consciousness, it becomes a valid source of knowledge.

So do not let the writer within you wallow in the luxury of dormancy, arise it before it slides into perennial and everlasting oblivion of its very existence.

Narendra Kumas (Narendra Kumar)

encapulating the treasure

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CAMPUS RECRUITMENTS

Training and Placement Cell has secured fabulous placements in the following companies of great repute during the current academic session:

Campus for BE students

S. No	I Name of the company	of tions	
	2008 Batch		
1.	Accenture Services Pvt. Ltd., Bangalore		
2.	Birlasoft Ltd., Noida		
3.	i-flex solutions Ltd., Mumbai		
4.	Impetus Infotech India Pvt. Ltd., Indore		
5.	Infosys Technologies Ltd., Bangalore		
6.	Kanbay Software (India) Pvt. Ltd., Pune		
7.	L & T Infotech Ltd., Mumbai	06	
8.	L & T Limited (e-engineering Solutions), Mumbai		
9.	Mphasis, an EDS Company, Bangalore		
10.	Persistent Systems Ltd., Pune		
11.	PharmARC Analytic Solutions, Bangalore		
12.	Satyam Computers Service Limited, Hyderabad		
13.	Syntel INC, Pune		
14.	Tech Mahindra Ltd., Pune		
15.	Torry Harris Business Solutions, Bangalore		
16.	U S Technology, Chennai		
17.	Zenith Software Ltd. Bangalore		
18.	Uttam Galva Steel, Mumbai		
19.	Life Business Projects, Delhi	05	
20.	Wipro BPO (A division a Wipro Ltd.), New Delhi		
21.	Bharti Airtel Services Ltd., Delhi		
22.	Ocean Ship Management Services, Mumbai		
23.	Saint Gobain Glass, Tamil Nadu		
24.	Adani Group,		
25.	Huawei Telecommunications Co. Pvt. Ltd. Gurgaon		
26.	HCL Technologies Ltd. (BPO), Noida		
27.	IBM India Pvt. Ltd. Bangalore		
28.	Indian Military Academy, Dehradun		

To find what you seek in the road of life, the best proverb of all is that which says:

"Leave no stone unturned."

-- Edward Bulwer Lytton

Campus for BE students

S. No.	Name of the company	No. of selections	
INO.	2009 Batch		
1.	Infosys Technologies Ltd., Bangalore	80	
2.	Capgemini, Hyderabad		
3.	L&T Ltd. (Core), Mumbai		
4.	Persistent Systems Ltd., Pune		
5.	Ital Machin		
6.	D . I. I Pancalore		
7.	Syntel Inc, Pune		
8.	Nagarro, Gurgaon		
9.	Wipro Technologies Ltd.		

Campus for MBA students

2008 Batch			
1	Kotak Securities Ltd., Mumbai	3	
2	Shriram Transport Finance Co. Ltd., Chennai	2	
3	Desai Brothers Ltd., Pune	10	
4	Becon Insrurance Brokers Pvt. Ltd., Vadodara	9	
5	Wipro Limited, New Delhi (BPO)	3	
6	HDFC Bank, Allahabad	2	
7	Bharti Airtel Services Limited, Delhi	3	
8	Max New York Life Insurance Co. Ltd, Gurgaon	1	

It is noteworthy that 273 students of 2008 batch and 216 students of 2009 batch of BE have secured placement in numerous companies of high repute, so far.

NATIONAL CONFERENCE ON ENERGY

SKIT in association with SKIT ISTE Chapter & SKIT Rajasthan Renewable Energy Club organised a two day National Conference on 'Strategies for an Energy Sufficient India' on 8 & 9 February 2008 under the coordination of Mr. Alok Mathur, Reader, Dept. of Mechanical Engineering. The main objective of the conference was to highlight the importance of sufficient power for industrial, commercial, social and economic growth of the country and strategies to be adopted to quickly achieve the goal of energy sufficiency through judicious use of resources. The conference provided a forum for interaction of academicians and working professionals for sharing their researches to address

diverse issues related to energy.

Its inaugural ceremony was graced by the presence and addresses of Mr. Yaduvendra Mathur, Secretary Energy, Govt. of Rajasthan, Mr. M.M. Bhardwaj, M.D. REIL, Prof. A.P. Bhatnagar, Ex-Director, Sardar Patel Renewable Energy Research Institute, Gujrat and Mr. Shanti Prasad, Ex-Chairman, Rajasthan Electricity Regulatory Commission. This two day long discourse on energy, along with the presentation of research papers by many academicians and research scholars, witnessed the plenary talks by eminent speakers from industry and academia, namely, Dr. V. Ranganathan, IIM, Bangalore, Dr. Y.K. Vijay, University of Rajasthan, Jaipur, Dr. S.S. Deshmukh BITS, Pilani, Dr. D.K. Sharma, IIT, Delhi, Dr. S. Calla, Chief Engineer, RVUNL, Prof. Ramesh Bansal from Fiji, Mr. Nitin Goyal from Suzlon Energy Ltd., Mr. Manoj Mishra from Enercon, Dr. D.K. Jain, MNIT, Jaipur, and Dr. Jyotirmay Mathur, MNIT, Jaipur.

During the valedictory session prizes were given to the best papers of their respective sessions. Prof. A.P. Bhatnagar and Mr. Shanti Prasad were honoured with Life Time Achievement Award for their unforgettable contribution in the field of energy. Corporate organizations - REIL, Jaipur, Suzlon Energy Ltd. and Enercon were awarded Performance Excellence Award for their contribution in manufacturing and

promoting means of harnessing renewable energy sources.

A technical exhibition was also organised in which organisations like REIL, Suzlon Energy Ltd., Enercon etc. participated and demonstrated their products.

SKIT ACQUIRES TCS ACCREDITATION

After taking note of Institute's infrastructure and interacting with the faculty and students of 2009 and 2010 batches Tata Consultancy Services has accredited SKIT for campus placements of its students.

PRAVAH - 2008

The techno-cultural and sports extravaganza, Pravah-2008 was organised on April 3- April 5, 2008.

Director Mr. K.R. Bagaria welcomed the guests and took them through the journey of what milestones Pravah has achieved over a period of seven years.

The inaugural function witnessed the gracious presence of the chief guest, Prof. R.P. Dahiya, Director, MNIT, Jaipur and guests of honour, Prof. S.M. Joshi, emeritous scientist, CEERI, Pilani and Mr. Manojit Majumdar, Country Manager, IBM.

Prof. Dahiya, in his inaugural speech emphasised over enhancing the employability of engineers through upgrading and updating the standards of quality education. Where Prof. Joshi appreciated the efforts of SKIT in providing quality education to students, Mr. Majumdar stressed upon abundance of global opportunities available to

present-day technocrats.

Prof. S.L. Surana while proposing the vote of thanks categorically asserted how India has proved all myths wrong about its being an exotic country of snake charmers. He said it now produces leaders in all walks of life.

Pravah-2008 witnessed a good number of fascinating technical, cultural and sports inter-collegiate events including: Art Da Techno (Technical Exhibition), Advertizia (ad-mad show), Drishtikone (English Debate), Techno Gladiators (Technical Paper presentation), Gimmicks (Business Plan), Code Matrix (On the Spot Software Development), Corpo-Tsar (Management Icon), Razzmatazz, Gliteraazi, Olympia, Anubhuti (Kavi Sammelan), Circuit Rider, Expresso (Express Yourself), Riddle of Sphinx (QUIZ Extravaganza for Budding Professionals), Byzantine, Glitz (Theme Walk), Lan Party and Le Travail.

Hundreds of teams from twenty five colleges of the state participated in various events. Fabulous prizes including cash, gift vouchers and electronic gadgets and audience prizes were among the main attractions of these competitions. We feel highly grateful to our sponsors -IBM, Infosys Technologies Ltd., Rajasthan Patrika, PT Education, Pepsi, Spice Mobile and many morefor their prompt support which made the entire journey easy for us to sail through.

In addition to inter-collegiate

events, a large number of highly innovative and interesting collegiate events, exclusively for SKITians, were also organised. These included: Zeitgeist, Laughter Challenge, Kranky Inventions, On the Spot Painting, T-shirt Painting, Face Painting, Tech Hunt, Treasure Hunt,

Mind Sport, Cryptics, Explore C, Dalal Street, Sudoku, Gadget o Geek, Pictionary, Sun Seminar, Dextro Mania, Rangoli Mahendi and SKIT Idol etc. Some activities were organised exclusively for faculty and staff.

Annual Day Celebration:

Pravah-2008 concluded with its 'Annual Day' celebration. The function was graced by the benign presence of a huge number of invited guests. Hon'ble Justice Mr. Chatra Ram Meel, Justice, Rajasthan High Court was the chief guest of the occasion. Guests of honour comprised

		(IT won prizes in various intercollegiate events:	
Name	Branch	Event	Winner
Shreyas Srivastava	ME VIII Sem	Solo Song	Runner up
Nancy Gupta	CS VI Sem	Solo Classical Dance	Winner
Shabnam Bano	IT IV Sem	Solo folk dance	
Priya Hotwani	IT VIII Sem	Solo folk dance	Runner up
Vikas Kshatriya	EE IV Sem	Solo Western Dance	Winner
Sudansh Bhatnagar	EC VI Sem	Solo Western Dance	Runner up
Shraddha & Group	CS VIII Sem	Group Classical Dance	Winner
Shikha & Group	CS VI Sem	Group Classical Dance	Runner up
Vivek & Group	CS VIII Sem	Group Folk Dance	Winner
Shabnam & group	IT IV Sem	Group Folk Dance	Runner up
Vikas & group	EE IV Sem	Group Western Dance	Winner
Gaurav Sharma	EE IV Sem	Robo Marathon	Winner
Gunjan Bakliwal	EE IV Sem	Robo Marathon	Winner
Kapil Shkla	EE IV Sem	Robo Marathon	Winner
Iitendra Neel	EE IV Sem	Robo Marathon	Runner up
Prateek Chaurasia	EE IV Sem	Robo Marathon	Runner up
Vikas Parihar	EE IV Sem	Robo Marathon	Runner up
Shikha Agarwal	IT VIII Sem	Techno Gladiator (PPT)	Winner
Sanchit Grover	IT IV Sem	Techno Gladiator (PPT)	Runner up
Vidit Kararia	ME IV Sem	Techno Gladiator (PPT)	Runner up
Sanjeev Gulyani	ME IV Sem	Techno Gladiator (PPT)	Runner up
Vikash Parihar	EC IV Sem	English Debate (For the Motion)	Runner up
Bhumika Kumawat	EC VI Sem	English Debate (Against the Motion)	Winner
Vivek Chandra Gautam	CS VIII Sem	Corpo Tsar (Management Icon)	Winner
Shiker Srivastava	CS VIII Sem	Corpo Tsar (Management Icon)	Runner up
Ashish Khandelwal	E & CE IV Sem	Circuit Rider	Winner
Abhishek Pareek	E & CE IV Sem	Circuit Rider	Winner
Vyas Abhishek	E & CE IV Sem	Circuit Rider	Winner
SKIT Team		Art Da Techno	Consolation Prize
Ankit Khandelwal		Anubhuti	Winner
SKIT Team		Basket Ball (Boys)	Winner
SKIT Team	- I - I	Basket Ball (Girls)	Winner
SKIT Team	- Light Springs - 1 (Scripes)	Volley Ball (Boys)	Runner up

Prof. Bhagirath Singh, Vice Chancellor, MD University Ajmer, Mr. N.R. Choudhary, Chief Engineer, Indian Railways and Mr. Harish Jain, a leading exporter of the state.

The greeting and honouring of guests and inaugural speeches were followed by cultural programmes comprising myriad hues of folk and classical songs and dances, thrilling and mesmerizing western songs and dances, hilarious skits and various other entertaining activities. These programmes were studded with prize distribution to and honouring of academic and professional achievers. The celebration ended with sumptuous dinner for all.

Academic Excellence Awards

Prof. R.S. Nirjar Academic Trophy was awarded to Poonam Singh (Information Technology) for securing overall first rank in the college across all branches of III B.E. during the session 2006-07.

Prof. Alam Singh Academic Trophy was awarded to Neha Anand (Electronics & Communication Engineering) for securing overall first rank in the college across all branches of II B.E. during the session 2006-07.

Academic Trophy was awarded to Bharti Goyal (Computer Science and Engineering) for grabbing overall first rank in the college across all branches of I B.Tech during the session 2006-07.

Pride of SKIT Award

Ashish Goyal of Electrical Engineering, 2005 batch and presently working in Secure Meters, Udaipur, was conferred on "Pride of SKIT' for exhibiting academic and professional excellence.

Appreciation Awards

Ms. Shilpi Gupta and Mr. Mahendra Kumar Beniwal - both from Dept. of Computer Science & Engineering, Ms. Sonali Singh and Mr. Sarfaraz Nawaz and Mr. Ritesh Gupta - all from Dept. of Electrical Engineering were given appreciation awards for arranging educational tours to Infosys Technologies Ltd., Chandigarh and RAPP, NPCIL, HPP, Rawatbhata, Rana Pratap Sagar dam, Kota respectively.

IBM INDIA LAUNCHES IT'S FIRST TIVOLY COE ON SKIT CAMPUS

IBM India launched the first Tivoli Center of Excellence (COE) on SKIT campus on April 3, 2008 with the objective of enabling the institute to train and build a skilled resource base on leading software technologies. Till now IBM has established three other Centers of Excellence in India - Rational, IM and Websphere.

The center will provide a unique opportunity for students to enhance their skill set on technologies relevant to the market outside and understand IBM products and develop world class solutions. IBM will follow a twin pronged approach of one, enabling the college to have access to the technologies relevant to the market, second, training faculty to ensure the impartation of the same on the students. Through this initiative, IBM will work closely with

the universities in and around Jaipur, making SKIT the center of learning. Students will be able to work on various Information Management products such as Tivoli Asset Manager, Identity Manager, Tivoli Storage Manager V5.3, IBM Tivoli Express, Maximo etc.

Inaugurating the Tivoli CoE at the institute, Manojit Majumdar, Country Manager - Developer Works/ Academic Initiative/ Globalization, IBM India/ SA said, 'Many local industries as well as government organizations, which would like to work on such technologies but do not have the requisite infrastructure to run and check these solutions out, can work with the college and work on a prototype before deciding to contribute towards the development of the local industry.'

For this initiative SKIT is providing infrastructure and high end system while IBM is providing the entire Information Management Software suite free of cost.

INFOSYS's CLOSE CAMPUS

Infosys Technologies Ltd conducted a close campus recruitment drive for 2009 batch students and selected 80 SKITians.

AICTE-SPONSORED FACULTY DEVELOPMENT PROGRAMME

AICTE- sponsored faculty development programme was organised by SKIT between April 28 and May 10, 2008 with the aim of making new teachers aware of teacher competence and train them to exploit this to the fullest. The thrust areas of the programme were:

making student teacher communication more effective, training new entrants into laboratory experiment designing and classroom lecture planning, and delivering the same and training them in student counseling.

The programme was inaugurated by Mr. D.K. Sharma, Vice President, National Engineering Industries Ltd., Jaipur and Ms. Monika Joshi, HRD Manager, National Engineering Industries Ltd., Jaipur was the guest of honour for the inaugural function.

The programme was coordinated by Prof. N.K. Banthiya, Head, Dept. of Mechanical Engineering, SKIT, Jaipur and the faculty for it included Prof. Banthiya himself, Prof. S.K. Soni, Retired Professor and Head, Media Research & Development Centre (MRDC), National Institute of Teachers' Training & Research (NITTR), Bhopal, Dr. V.H. Radhakrishnan, Professor & Head, Curriculum Development Centre NITTTR, Bhopal and Dr. K.K. Jain, Professor and Head, Dept. of Mechanical Engineering, NITTTR, Bhopal.

Total forty one participants - 19 from SKIT and 22 from other AICTE approved institutions and industry-participated as registered participants and thirty four members of faculty from SKIT participated as part time non-registered participants.

Mr. S.R. Meel, Chairman, SKIT, was invited as chief guest for the valedictory function. He awarded certificates to the participants.

Participants found the programme

memorable and highly fruitful. Outstation participants were highly appreciative of the board and lodging provided on the SKIT campus.

WIPRO'S CLOSE CAMPUS

Wipro Technologies Ltd. conducted a close campus for 2009 batch students, for its Technology Infrastructure Service's Department. After four day long recruitment process running between 20 May and 28 May 2008, 73 SKITians were finally recruited. Recruiters appreciated SKITians for their technical and soft skills.

ROBOTIC WORKSHOP

A Robotic workshop 'iTRIx' was conducted by TRI Technosolutions Pvt. Ltd. Mumbai on 13th -14th Oct 2007 on SKIT campus under the supervision and coordination of Mr. Ramesh Pachar, Head, Dept. of Electrical Engineering, Mr. V.S. Bhatnagar, Reader, Dept. of E & CE, Rahul Jain (V Sem, E & CE) and Tanmay Pandey (V Sem, EE).

TRI is a young and dynamic, R&D driven company in the field of robotics and is founded by IIT Bombay Alumni, incubated at Society of Innovation and Entrepreneurship (SINE), IIT Bombay, India. By developing an active interest of youth in robotics, TRI aims to lay a strong foundation for the technical development of our country.

The workshop was first of its kind conducted in Rajasthan. 'iTRIx' was a microcontroller based robotics workshop where the art of designing and building autonomous robots were carried out by integration with a microcontroller. The robot (take

away kit) which the students made during the workshop was flexible enough to be modified for different applications such as line following robot, wall following robot, obstacle avoiding robot etc. iTRIx also focuses on conceptualization and designing of complex systems and helps in clearing concepts related to embedded systems, artificial intelligence and automation.

Students from across India participated in this workshop and enjoyed their stay on SKIT campus during the workshop.

BLOOD DONATION CAMP

Creating life is the greatest deed the God blessed us with, and saving it is the noblest deed a human being can take recourse to. SKIT, keeping this in mind, organized a blood donation camp on 29 September 2007 under the coordination of Dr. Y.C. Sharma, Reader, Dept. of Physics and in collaboration with Lion's Club, Jaipur and Santokhba Durlabhji Memorial hospital, Jaipur.

Mr. Anantha Shesha Das and Janardhan Das from Akshyaya Patra Froundation, Mr. Govind Sharma, Coordinator blood donation, Mr. Ashok Gangwal, President and Mr. K. S. Duggar from Lions Club and Dr. Sunil Sharma and Dr. Avinash from SDMH, Jaipur were present to grace the occasion.

In this camp more than two hundred SKITians donated their blood.

PHARMACY WEEK CELEBRATED

Pharmacy Week - 2007 was celebrated in Swami Keshvanand

Institute of Pharmacy from December 07 to December 08, 2007. Mr. P N Sarswat, Drug Controller, Rajasthan, was the chief guest of the function. This two-day long celebration observed the enthusiastic and vital organization of and participation in the various activities like speech competition, poster and model presentation, rangoli competition and various sports activities like cricket, badminton, volley ball, short put, discuss throw etc. Prizes and certificates were distributed to the winners of these events. Principal, SKIP, Mrs. Hemlata Dullar appreciated the efforts of students for making the celebration a great success.

LANGUAGE LAB GOES HI-TECH

Dept. of English has established a digital multimedia language laboratory equipped with thirty two computers and operated through Renet. It also has language teaching software courses from Clarity, Cambridge and Oxford University Press. In this lab students will not only be able to improve their communication in English but also be getting a chance of familiarising themselves with different accents of English and thus will be better equipped to overcome the barriers to communication when put in global conditions. This language lab can also be used for teaching and learning other languages which are gaining global currency in the changing economic conditions of the world.

CAMPUS CONNECT: TECHNICAL ROLL OUT PROGRAMME

Infosys designed Campus Connect: Technical Roll Out Program has been completed for 2009 batches in the end of May 2008. This programme will be commencing for 2010 from June 2008. Infosys has made this programme mandatory for all those who aspire to join it. Moreover, this programme is of great importance for all who desire to work with software industry.

CAMPUS CONNECT: SOFT SKILLS ROLL OUT PROGRAMME

Soft Skills Roll Out Programme, as designed by Infosys Technologies, Bangalore, has been conducted for BE 2010 batch -- a pilot batch of 40 students between July 24 and July 28, 2007, Electrical Engineering branch from September 15 to September 19, 2007 and E & CE 2010 branch from 21 January to 24 January 2008 -- under the coordination of Dr. Rohit Mukherjee. The workshop focused on all the components of soft skills including, various nuances of communication, team work, emotional intelligence, presentation skill and interview techniques. Special presentations by Prof. M.L. Bhargava on corporate culture and how to adapt to it were enlightening to all and sundry. The workshop was conducted in an informal manner inviting maximum participation and interaction on the part of students and facilitators.

This hundred hour programme is carried out through these workshops and contact sessions. Participants are given certificates by Infosys after the successful completion of it. This programme has been made mandatory for all who aspire to join Infosys. Apart from this these, soft skills, or life skills to use the more appropriate term, are going to help SKITians in all walks of their lives, whether they join Infosys or some other company or decide to take up some entrepreneurial enterprise.

SABBATICAL PROJECTS FOR INFOSYS COMPLETED

Mr. C.M. Choudhary, Reader and Head, Dept. of Computer Science and Engineering completed a 35-days sabbatical project for Infosys Technologies Ltd. on September 27, 2007. In this project he worked on "Design Patterns Development and Implementation in Software Engineering."

Mr. Praveen Choudhry, Training & Placement Officer did a sabbatical project on "Ethical Orientation" for Infosys Technologies Ltd. This 4-6 week long project started on January 14, 2008. In this Mr. Choudhary studied the value system at Infosys and suggested efficient strategies for imparting the same.

WIPRO'S CENTRALIZED CAMPUS

Wipro BPO organized a centralized campus at SKIT from 17 November to November 20, 2007 in which around 32 colleges of Rajasthan participated. 30 students of SKIT finally got selected after

going through three round selection process of screening, voice assessment and HR interview.

ZENITH CONDUCTS CLOSED PLACEMENT DRIVE

Zenith Software Ltd. conducted closed campus recruitment drive for SKITians on September 22, 2007 and finally recruited nine students. Zenith's HR executive Harsha informed that the company was impressed with the SKIT alumni already working there and that is why a closed campus was organised for SKITians.

PhD AWARDED

Mr. Devendra K. Singhal, Lecturer in Physics was awarded PhD on February 18, 2008 by the University of Rajasthan. He worked on "Analysis and Measurement of Thermal Properties of Some Perishable Produce" under the supervision of Dr. Usha Singh, Asst. Professor, University of Rajasthan.

PhD THESES SUBMITTED

Mr. Amber Srivastava, Reader in Mathematics submitted his PhD thesis on March 19, 2008 to the University of Rajasthan. He worked on "Operational Calculus in one and Two Variables and Special Functions" under the supervision of Dr. V.B.L. Chaurasia, Asst. Professor, Dept. of Mathematics, University of Rajasthan.

Ms. Pramila Kumawat, Lecturer in Mathematics submitted her PhD thesis on May 21, 2008 to the University of Rajasthan. She worked on "Study of Bianchi Types I, V, IX Tilted Cosmological Models

in General Relativity" under the supervision of Prof. Raj Bali, University of Rajasthan, Jaipur.

RESEARCH PAPERS **PUBLISHED**

UNIFORMLY STARLIKE AND UNIFORMLY CONVEX FUNCTIONS PERTAINING TO SPECIAL FUNCTIONS

-- Amber Srivastava

Reader, Dept. of Mathematics

Published in Journal of Inequalities in Pure and Applied Mathematics vol. 9 (2008), Issue 1 published by Victoria University.

BOOKS PUBLISHED

A TEXT BOOK OF ENVIRONMENTAL **ENGINEERING**

--Dr. Archana Saxena

Reader & Head, Dept. of Chemistry

Published by Jaipur Publishing House (JPH), Jaipur.

ENVIRONMENTAL ENGINEERING EXPERIMENTS

-- Dr. Archana Saxena

Reader & Head, Dept. of Chemistry

Published by Jaipur Publishing House (JPH), Jaipur.

RESEARCH PAPERS PRESENTED

ENERGY SITUATION IN INDIA: PRESENT SCENARIO, DEPLETING RESOURCES AND **FUTURE OPTIONS**

-- Dr. S.L. Surana

Principal, SKIT

Keynote address delivered at All India Seminar on "Bridging the Demand Gap and Alternative Sources of Energy" organised by

Institution of Engineers (I) on February 23-24, 2008 and held at Jaipur.

CHROMATOGRAPHIC SEPARATION OF ANTIBIOTICS

--Dr. Sangeeta Vyas

Reader, Dept. of Chemistry

Presented at All India Seminar on "Emerging Trends and Sustainable Technologies for Separation Processes in Chemical & Allied Industries" organized by Rajasthan State Centre, The Institution of Engineers (India) on July 28-29, 2007.

FLUID IDENTITIES AND HOME: CARYL PHILLIPS'S THE ATLANTIC SOUND

--Narendra Kumar

Lecturer, Dept. of English

Presented at VI World Conference and XIV All India English Teachers Annual Conference on "New Urges in New Literatures in English" organized jointly by WASLE, IASCL and Dept. of English and Foreign Language, MD University, Rohtak on September 5-6, 2007.

SIMULATION STUDY OF GTO BASED STATIC TRANSFER SWITCH USING MATLAB

--R.K. Pachar (Reader & Head, EE)

--Dr. S.L. Surana (Principal, SKIT)

Presented at an international conference on "Control Systems and its Applications" organized by World Science and Engineering Academic Society (WSEAS) and held at Cairo, Egypt on December 15-16, 2007.

SOLUTION OF A CONVOLUTION INTEGRAL EQUATION OF

FREDHOLM TYPE BY USING THE THEORY OF MELLIN **TRANSFORMS**

-- Amber Srivastava

Reader, Dept. of Mathematics

Presented at the international conference organized by the Society for Special Functions and their Application and held at MNIT, Jaipur on December 15-16, 2007.

NEGOTIATING ERASURE: IDENTITY IN KIM SCOTT'S BENANG

--Narendra Kumar

Lecturer, Dept. of English

Presented at III Biennial International Conference on "Identity, Ethos and Ethnicity: India & Australia" organized jointly by Dept. of English and Indo-Australian Centre, Dayanand College, Ajmer on January 27-29, 2008.

BIANCHI TYPE I TITLED COSMOLOGICAL MODEL FOR BAROTROPIC PERFECT FLUID DISTRIBUTION WITH HEAT CONDUCTION IN GENERAL RELATIVITY

-- Pramila Kumawat

Lecturer, Dept. of Mathematics

Presented at 19th Annual Conference of Rajasthan Ganit Parishad (RGP) on 18-19 January 2008 held at JEC, Kukas.

The following papers were presented by various members of faculty and students at the national conference on 'Strategies for Energy Sufficient India' organised on February 8 & 9, 2008 by SKIT, Jaipur itself:

POWERING OUR FUTURE STRATEGY FOR ENERGY

-- Prof. M.L. Bhargava

Head, Training & Placement Cell QUALITY POWER IMPROVEMENT USING NETWORK RECONFIGURATION

--R.K. Pachar (Reader & Head, EE) --Prof. S.L. Surana (Principal, SKIT) PROGRESS, PROSPECTS AND CHALLENGES OF WIND ENERGY DEVELOPMENT

--Prof. N.K. Banthiya (Head, ME) ENERGY AUDIT - A CASE OF AN **ELECTRONIC UNIT**

-- V.S. Bhatnagar (Reader, E & CE) ENERGY SUFFICIENT INDIA: A STRATEGY

--R. Govind Raj (Reader, ME) BIOFUELS: A CLEAN ENERGY ALTERNATIVE

-- Dr. Archana Saxena

(Reader, Chemistry)

-- Dr. Sangeeta Vyas

(Reader, Chemistry)

-- Sudhir Choudhary

(II B. Tech, E & CE)

ENERGY RECOVERABLE FROM SOLID WASTES

--Dr. Sangeeta Vyas

(Reader, Chemistry)

--Dr. Archana Saxena

(Reader, Chemistry)

ALTERNATIVE FUEL

-- Praveen Choudhary

(II B.Pharma, SKIP)

--Hemlata Dullar (Principal, SKIP) GLOBAL WARMING: DEALING & ACHIEVING ENERGY INDEPENDENCE FOR A NEW **ENERGY ECONOMY**

-- Dr. Vinita Sharma

(Sr. Lecturer, Chemistry)

--Dr. Veenu Sisodia

(Reader, Physics)

GREEN BUILDING

--Poonam Rijwani

(Lecturer, CS & E)

--Mahendra Beniwal

(Sr. Lecturer, CS & E)

ENERGY EFFICIENCY BUILDINGS

-- Ashish Nayyar (Lecturer, ME)

-- Badal Gupta (VI BE, ME)

SOLAR POWERED CARS

-- Sandeep Pareek (II B. Tech., ME) MUNICIPAL SOLID WASTE MANAGEMENT THROUGH CARBON CREDITS & BIO BIN

-- Sanchit Grover (II B. Tech., IT)

The papers of Prof. M.L. Bhargava and Mr. R.K. Pachar & Prof. S.L. Surana were awarded for being the best of their respective sessions'.

SUMMER SCHOOLS AND **WORKSHOPS ATTENDED**

Dr. Yogesh C. Sharma attended MSSC Summer School on the ab initio simulation of crystalline and defective solids with the CRYSTAL06 code (MSSC2007) during 2-7 September, 2007 orgainsed by Theoretical Chemistry Group of the Torino University Torino, Italy. He presented a paper there on "Compton Profile Study of Arsenic and Arsenic Triselenide." During the same visit he attended workshop on Local Correlation Methods: From Molecules to Crystals (LCC2007) at Max-Planck Institute for Complex Systems, Dresden, Germany during 12-15 September, 2007. He presented a paper there on "Study of electron-electron correlation in A15 compounds".

He also visited the Department of Physics "Galileo Galilei" at university of Padova, PADOVA (ITALY) from 17 to 19th Sept., 2007and delivered a Lecture on "Developments in Compton Scattering".

Mr. Praveen Choudhry, TPO and Mr. Narendra Kumar, Lecturer, Dept. of English, attended a fiveday workshop on Campus Connect: Soft Skills Program, conducted by Infosys Technologies Ltd. and organised at Infosys's Chandigarh campus between September 10, 2007 and September 14, 2007.

Dr. N.K. Banthiya, Prof. and Head, Mr. Alok Mathur, Reader and Mr. Ashish Nayyar, all from the Dept. of Mechanical Engineering, attended a two day workshop, on 26 - 27 May, 2007, on Intellectual Property Rights (IPR), organised jointly by Patent Information Centre-DST, Rajasthan and MNIT, Jaipur.

Ms. Nupur Srivastava (Sr. Lecturer), Ms. Archana Rai (Lecturer), Ms. Sangeeta Choudhary (Sr. Lecturer), and Ms. Pramila Kumawat (Lecturer), all from the Dept. of Mathematics, attended an AICTE Staff Development Programme on 'Application Orientation in Engineering Mathematics' from June 25, 2007

to July 06, 2007. The programme was organized by MNIT Jaipur.

Dr. Vikas Shrotria, Reader, Department of Management Studies, attended a two weeks Faculty Development Programme in May 2007 on 'Quality Enhancement in Management Education'. The programme was sponsored by AICTE and organized by IILM, Jaipur and it focused on deliberating quality issues and perspectives in management education.

Mr. Vinod Kataria, Reader, Dept. of Electronics and Communication Engineering, attended a summer workshop on 'Advances in Digital and Optical Communication' between 20 and 30 June, 2007.

Mr. Alok Mathur, Reader, Dept. of Mechanical Engineering and Mr. V.S. Bhatnagar, Reader, Dept. of Electronics and Communication Engineering, attended a workshop on NEN EEC Module 2, i.e., "The Varied Faces of Case Teaching" on January 9-11, 2007 organised at IIM, Bangalore. The workshop was conducted by Prof. John Mullins, Asst. Prof., London Business, UK and Prof. Murray Low, University of Columbia, USA.

Mr. A.S. Poonia, Reader and Head, Prof. V.S. Bhatnagar, Mr. Raghvendra Singh, Lecturer and Mr. Mukesh Arora, Lecturer, all from Dept. of Electronics and Communication Engineering attended a workshop on "Advance Communication" organised by Falcon Electrolec Pvt. Ltd., Indore.

Mr. Ramesh Pachar, Reader and Head, Dept. of Electrical Engineering and Ms. Sonali Singh, Lecturer, Dept. of Electrical Engineering, attended a five-day short term training programme on "MATLAB, ETAP and their Applications to Electrical Engineering" on 7-11 January 2008.

Ms. Seema Sethia, Sr. Lecturer and Ms. Kiran Rathi, both from the Dept. of Electronics and Communication Engineering participated in a workshop on "Tanner Tools Pro" (A complete VLSI EDA design system) held at Banasthali University on December 23, 2007.

Mr. Anand Singh, Lecturer, Dept. of Electrical Engineering participated in a workshop on "Technology Entrepreneurship" organised by BIT, Pilani on 23-24 November 2007.

Mr. Sawanta Ram Dogiwal and Ms. Shilpi Gupta - both Sr. Lecturers, Dept. of CS & E - attended a Campus Connect: Train the Trainer (TTT) workshop on 'Enterprise Application Integration' organised by Infosys Technologies Ltd., Chandigarh on 27-29 May, 2008.

CONFERENCES ATTENDED

Mr. Narendra Kumar, Lecturer, Dept. of English, attended a seminar on "Post-1980s Subcontinental Writing in English Border, Border Theories, and Crossing Borders" organized jointly by IRIS, Jaipur, Jawahar Kala Kendra, Jaipur and Dept. of English, University of Rajasthan, Jaipur from September 20, 2007 to September 22, 2007.

Mrs Hemlata Dullar, Principal SKIP, attended a two day National conference on Recent trends of Research in Pharmaceutical Sciences at Nathdwara, Rajasthan on 7th and 8th January 08.

Dr. Vikas Shrotriya, Reader, Department of Management Studies, attended a seminar on "Venture Capital" in Oct 2007, organized by FICCI, Jaipur and Rajasthan Venture Capital Fund. He also attended a seminar on "Commodity Derivatives" in Oct 2007, organized by ICFAI, Jaipur.

Dr. Veenu Sisodia, Reader, Dr. Yogesh C. Sharma, Reader and Dr. Devendra K. Singhal, Lecturer, all from Dept. of Physics attended the International Conference on Condensed Matter Physics & 5th Annual Convention of Rajasthan Physics Association organised under the auspices of University of Rajasthan, University of Bikaner and Bikaner Engineering College on November 25-28, 2007.

Tarun Kumar (III BE, ME) attended 12- World Lake Conference, Taal - 2007 on "Conserving Lakes and Waterlands for Future" organised at Birla Auditorium by ILEC and Ministry of Environment, Govt of India on 28 Oct. - 3 Nov., 2007. He also attended International Conference on Condensed Matter Physics & 5th Annual Convention of Rajasthan Physics Association organised under the auspices of University of Rajasthan, University of Bikaner and Bikaner Engineering College on November 25-28, 2007 and participated in the international conference of The Society for Special Functions and Their Applications held at MNIT, Jaipur on December 15-16, 2007.

Ms. Sangeeta Choudhary, Sr. Lecturer, Dept. of Mathematics attended 19th Annual Conference of Rajasthan Ganit Parishad (RGP) on 18-19 January 2008 held at JEC, Kukas.

ARTICLES PUBLISHED

Dr. Vikas Shrotriya, Reader, Dept. of Management Studies, published following articles in various journals:

BENCHMARKING PERSPECTIVE

Published in June 2007 issue of MBA Review, a magazine published by ICFAI University

A B C OF ACTIVITY BASED COSTING

Published in July 2007 issue of The Accounting World, a magazine published by ICFAI University

AVOID MICROMANAGEMENT FOR BETTER MANAGEMENT

Published in July 2007 issue of MBA Review, a magazine published by ICFAI University

VIRTUAL OFFICE REALITY OF THE FUTURE

Published in July 2007 issue of E -Business, an e-magazine published by ICFAI University

FACTORING: AN OFF BALANCE SHEET FINANCING TECHNIQUE

Published in July 2007 issue of ICFAI Reader, a monthly corporate finance digest published by ICFAI University

ALTERNATIVE BANKING AN EMERGING TREND

Published in June 2007 issue of The Professional Banker, a monthly banking digest published by ICFAI University

EFFECTIVE TIME MANAGEMENT

Published in August 2007 issue of HRM Review, a monthly digest of human capital published by ICFAI University

BANCASSURANCE

Published in January 2008 issue of Professional Banker, a monthly banking digest published by ICFAI University

BRANDING IN FOOD INDUSTRY

Published in January 2008 issue of Advertising Express, a monthly advertising and marketing digest published by ICFAI University

CAREER MANAGEMENT EMERGING PERSPECTIVES

Published in January 2008 issue of MBA Review, a magazine published by ICFAI University

VIRTUAL OFFICE REALITY OF THE FUTURE

Published in July 2007 issue of E -Business, an e-magazine published by ICFAI University

FACTORING: AN OFF BALANCE SHEET FINANCING TECHNIQUE

Published in July 2007 issue of ICFAI Reader, a monthly corporate finance digest published by ICFAI University

ALTERNATIVE BANKING AN EMERGING TREND

Published in June 2007 issue of The Professional Banker, a monthly banking digest published by ICFAI University

EFFECTIVE TIME MANAGEMENT

Published in August 2007 issue of HRM Review, a monthly digest of human capital published by **ICFAI** University

DISCIPLINE MUST FOR ORGANIZATIONAL SUCCESS

Published in issue of HRM Review, October 2007, published by **ICFAI University Press**

HYBRID FINANCING A **PERSPECTIVE**

Published in ICFAI Reader, Nov 2007, published by ICFAI University

ACHIEVING SUCCESS

Published in MBA Review, Nov 2007, published by ICFAI University TECHNO BANKING-GATEWAY TO MARKET LEADERSHIP

Published in Professional Banker, Nov 2007published by ICFAI University

INFLATION ACCOUNTING Published in The Accounting World, Jan 2008 published by ICFAI University Press

A CRUCIAL MORALE PERFORMANCE DRIVER

Published in HRM Review, February 2008 published by ICFAI University Press

GETTING ORGANIZED FOR **IMPROVED PERFORMANCE**

Published in MBA Review, February published by ICFAI 2008, University

RESPONSIBILITY ACCOUNTING

Published in The Accounting World, March 2008, published by ICFAI University Press

MANAGEMENT EDUCATION **QUALITY MATTERS**

Published in MBA Review, April 2008, published by ICFAI University THE RISE OF E MARKETING: ADVANTAGES AND LIMITATIONS

Published in E - Business, May 2008 e- business, published by ICFAI University.

INFOSYS'S ROAD SHOW

Technical Evangelist of Infosys Technologies Ltd., Chetna Sood, conducted a road show to popularize campus connect program of Infosys among the students. On this occasion she also awarded certificates to the students of previous batch of this programme. It is noteworthy that SKIT is the first self-financed institute of Rajasthan to have become a part of this initiative of Infosys which aims at grooming industryready technocrats.

HR MANAGER OF INFOSYS **ON SKIT CAMPUS**

HR Manager of Infosys Mr. Sourabh Sharma visited SKIT and addressed 2009 batch students. In his interaction with students he focused on what a software industry looks for in its engineers. He also talked about how to prepare for campus recruitment for Infosys. He satisfied all the queries raised by students.

E-CELL LAUNCHED

Entrepreneurship Cell of SKIT was launched by Prof. S.L. Surana on January 04, 2008 in a formal ceremony attended by Sharad Kamra, representative from NEN, Jaipur, Prof. M.L. Bhargava, other members of faculty and students. Prof. Bhargava facilitated oath taking by all the people present. The logo of SKIT e-cell was also launched. Students were exuding with enthusiasm throughout the activities and after the programme was over.

ARENA OF EXTRA-**CURRICULAR ACTIVITIES EXPANDED**

Keeping to its commitment of generating well-rounded technocrats, SKIT has started devoting two hours on every Wednesday on extra-curricular activities from September 19, 2007. To keep the academic schedule intact the timings of college have been extended by two hours on every Wednesday. This initiative will ensure students' participation in a hoards of activities ranging from culture activities to enhancing linguistic abilities to sports to participating in various clubs like ISTE students chapter, Toastmasters Club, NCC, Red Cross Society etc. The focus on academics will not be ruled out and extra classes, as per the need and demand of students, can also be arranged during these two hours.

It is noteworthy that trainers are invited for the activities like French language classes, Yoga, Music and Dance etc. The foreign language club has plans to include more languages as per the needs of the corporate world, although it has begun with French. In music classes the focus is given on both film and semi-classical music and instruments so far taken up for training are guitar and synthesizer. Dance club has so far been training students in western, semi-classical and folk dances.

PROF. G.R. VERMA'S ADDRESS TO SKITIANS

Prof. G.R. Verma, Professor Emeritus, University of Rhode, visited SKIT on October 18, 2007. In his address to SKITians, he motivated them to get rid of the shackles of superstitions and develop the tendency of interrogation to promote research in the area of science and technology. He also interacted with the faculty of mathematics department and appreciated their efforts in the direction of research. He talked at length about how they can pursue research in new areas of mathematics.

FRESHER - 2007

A Fresher party was organized by the 2nd Year students to welcome the 1st Year students on September 29, 2007 amidst much fanfare. The party began with the inauguration by Mr. K.R. Bagaria, Director, SKIT and Dr. S.L. Surana, Principal, SKIT. The entire programme continued for more than four hours in which students spread the various hues of cultural programmes which comprised film and folk songs and dances, and various hilarious and entertaining skits and other programmes. Students presented a memento to the college. Party ended with a sumptuous dinner for all.

FAREWELL - 2008

Students of 2009 batch organised a farewell party for the students of outgoing batch on May 31, 2008. Principal Prof. S.L. Surana in his inaugural speech congratulated the outgoing for its successful

completion of four years stay on the campus and wished it good luck. Students put up myriad hued cultural programmes and presented mementos to the outgoing batch students. The celebration concluded with dinner.

STUDENT CO-ORDINATORS OF T&P CELL FELICITATED

Dikshant Gaur, Ajay Singh Chaudhary, Lokesh Joshi and Ankit Bapna - all from IV B.E. Mechanical Engineering - Aakinchan Jain, Hemant Singh Bisht, Chetan Sharma, Hitesh Arora and Vivek Chandra Gautam - all from IV B.E. Computer Science and Engineering - Sushil Bhojwani and Pallav Joshi both from IV B.E. Information Technology - were felicitated on Farewell-2008 for their noteworthy services in organizing, managing and co-ordinating various placement activities between 2005 and 2008.

SKITians DO US PROUD

It is a matter of great pride for us that many SKITians participated in various national and state level cultural and technical festivals organized by various engineering colleges and won fabulous prizes:

- Ankit Mamodiya (III BE, CS & E) stood 2nd in Debate Competition held at Poornima College Of Engg., on 30.09.07.
- In TECHNORAZZ- 07, held at Seedling Academy of Design, Technology & Management, Jaipur on October 5-6, 2007 SKIT won the trophy of Best Participation in the event and Utkarsh (III BE, CS & E) stood 2nd

- in Panel Discussion.
- 3. Piyush Mathur (III BE, CS & E) stood 2nd in Group Discussion, Arpita Sharma (III BE, CS & E) won 3rd prize in JAM and a team comprising Ankit Jain(III BE, IT), Madhur Sheel (III BE, CS & E), Mayank Sharma (III BE, CS & E), and Hitesh Bargujar (III BE, CS & E) grabbed 2nd prize in Software Development contest in SHRADHANJALI 07, held at ARYA college on 17-19 September 2007.
- SKITians participated and won prizes at "ABLAZE - 2007" organized by ICFAI.

EDUCATIONAL TOURS AND INDUSTRIAL VISITS

- 1. Students of III BE (Electrical Engineering) went on a two day educational tour to Rawatbhata on September 28 29, 2007. They got a chance to visit RAPS, NPCIL, Rawatbhata and Rana Pratap Sagar dam, and hydro power plant Rawatbhata and practically comprehend the process of electricity generation.
- 2. Students of III BE (Electronics a n d C o m m u n i c a t i o n Engineering) visited Rajasthan Electronics and Instruments Ltd. (REIL), a Mini-Ratna, on October 10, 2007 and had a chance to see d e m o n s t r a t i o n o f manufacturing of Electronic Milk Tester (EMT) and solar photovoltaic panels.
- MBA students visited Autolite India to know about the practical working of this industrial unit.
- 4. MBA students visited

Ranthambhore Sanctuary to know more about the role of managers in wild life conservation.

 Dr. Archna Saxena and Dr. Sangeeta Vyas, both Readers in Chemistry arranged two visits to Sewage Treatment Plant for first year students during the session 2007-2008.

GUEST LECTURES FOR MBA STUDENTS

- Mr. Hemant Ambwani, Corporate Trainer, delivered a lecture on "Soft Skills Required for the Corporate Sector & Interview Skills".
- Dr. Anil Mehta delivered a lecture on "Time Management".
- Mr. Dharmendra Khandel from Tiger Watch delivered a talk on "Wild Life Conservation".

SKIT CAMPUS GOES WI-FI

SKIT has installed ubiquitous campus broadband via 802.11 wireless technology, known as Wi-Fi.

These networks promise a seamless connection for students and faculty to classrooms, research and other educational resources at anytime, anywhere. Many people will likely have their first experience of what it means to have continuous, high-speed, wireless Internet access on campus. With up to so many wireless access points installed throughout the campus, students can access the Wi-Fi network while studying in their dorm rooms or hanging out on the Green.

In first lot we have received 500 laptops and distributed among students and faculty members and

further we will continue to use latest technology in our best endeavor.

VP (HR), INFOSYS VISITS SKIT CAMPUS

Vice President (HR), Infosys Technologies Ltd., Mr. Umesha S, visited SKIT campus on September 3, 2007. In his meeting with Heads of Departments the issue of increasing the employability of students was discussed. In his address to students he threw light on the benefits of Campus Connect Program. He asserted that this programme is mandatory for all the aspirants striving to join Infosys. Apart from this progamme, as he said, is the result of long research by Industry and going to facilitate bridging the gap between academia and industry.

FACULTY DEVELOPMENT PROGRAMME

A Faculty Development Programme was organized in the Institute, primarily for new members of faculty from 28th July, 2007 to 1st August, 2007. Primary objective of the programme was to induct the new faculty to the teaching profession, and provide them basic skills required for the profession. The programme was coordinated by Dr. N.K. Banthiya, Professor & Head of the Department of Mechanical Engineering and included as Guest faculty, Prof. S.K. Soni, Ex-Director, National Institute of Technical Teachers' Training & Research, Bhopal. Programme discussed issues related to Instructional Planning and Course Files, Instructional Methods, Interactive Lecture, Design of Questions, Project work by students and Assessment of project work. A number of teachers also were involved in planning and undertaking micro-teaching assignment. They were provided feedback to further improve. Programme was highly appreciated by the participants.

FACULTY ENABLEMENT PROGRAMME

Two days faculty enablement programme was conducted for a group of twelve faculty members on August 2 & 3, 2007 between 9 a.m. and 4.30 p.m. each day. Facilitators for this programme were Dr. Sanjana Mehta and Ms. Noor Fathima of Stanley David & Associates, Bangalore; they also conducted Soft Skills Roll Out Programme for a group of thirty students on August 4 & 5, 2007.

In the faculty enablement programme all the five modules provided in the Facilitators Manual of Infosys's Campus Connect Program were delivered effectively. On day one first three modules, namely, The Art of Communication, The Hidden Data of Communication and In the World of Teams, and on the day two remaining two, namely, Discussions, Decisions and Presentations and Adapting to Corporate Life were covered. These modules were made more interesting by the use of various exercises, demonstrations and role plays. Audio and Video clips and case studies were employed to make the sessions interactive and

interesting and to provide better understanding of the modules. Each module was followed by adequate and illustrative debriefing and wrap up.

Half of the day two was dedicated to the presentations by the participants and the same was quite interactive and the feedback from the audience and facilitator was constructive and fruitful. The programme enabled the participants to have better understanding of the course content and delivery. This programme would prove to be very useful in imparting the soft skills training to the students.

The feedback from students on the sessions taken on day three and four was also very encouraging. Students were thrilled by the presentations which imparted soft skills on them in a very simple and lucid manner.

SKIT MANAGEMENT EXTENDS HAND OF SUPPORT

SKIT Management considering the poor financial condition, caused by untimely demise of the father, has decided to exempt Amit Shukla (VII Sem, ME) from paying the fee. He has informally promised to pay the fee after completing his degree in convenient instalments.

CHARTERING AND INSTALLATION CEREMONY OF SKIT TOASTMASTERS CLUB

Chartering ceremony and Installation of the Office of SKIT Toastmasters Club took place on August 4, 2007. This was attended by Mr. Sudhir Sharma, Area 11 Governor, leading all the Clubs in New Delhi, Mr. Vinay Jain, Area 16 Governor leading all the Clubs in Gurgaon, Jaipur and West Bengal and Mr. Deepak Menon, the Lt. Governor Marketing for District (District 82) comprising of 88 clubs in India and Sri Lanka, who are all eminent members of some Toastmasters' Club in New Delhi. The ceremony began with a Club Meeting, where members presented their speech projects and participated in the Table Topics round. After the meeting, all the club members were presented with their Charter Member certificates by Mr. Sudhir Sharma. The Special Guest for the ceremony was Mr. R.P. Kashyap, who is himself an engineer and entrepreneur and has a vast experience of working with clubs like Jaycee and Rotract for several years.

The ceremony was then followed by an in-house training programme for the executive committee members conducted by Mr. Deepak Menon, Mr. Sudir Sharma and Mr. Vinay Jain.

SWAMI ADHYATMANANDJI VISITS THE CAMPUS

The president of Sivanand Ashram and Gujrat Divya Jivan Sangh, Swami Adhyatmanand visited SKIT campus on August 7, 2007. Swami Adhyatmanad, a doctor by training, is now committed to spreading the preaching of sages of yore and sharing the knowledge of ancient

cultural and scientific heritage of ancient India. A centurion donor himself, he has conducted more than 680 Yogasana camps and collected 2,08,62,600 ml. of blood through 230 blood donation camps.

I YEAR ADMISSIONS

All the 420 seats of all branches were filled in the very first phase of the counseling conducted by RPETEAP 2007. SKIT once again swept the cream of admission seekers. The credit for this success goes to consistent and unfettering efforts of the entire SKIT family including the Management for providing best available infrastructure, erudite and committed academicians with the able guidance of the Principal Dr. S.L. Surana and sincere, versatile and hardworking students for perennially winning new milestones in academics, cocurricular activities and campus placements.

ISTE STUDENTS' CHAPTER: PRIZE DISTRIBUTION

ISTE student chapter of the Institute organised a "Logo Design Competition" exclusively for II BE students between 4 and 10 August, 2007, with the objective of fostering the creative and innovative side of budding engineers.

The competition aimed at designing a logo of ISTE student chapter of SKIT. The first three winner, namely, Nikhil Rathi (E & CE), Rajesh Ojha (IT), and Dhruv Gupta (CS & E) were awarded prizes on the occasion of Independence Day celebration on

August 15, 2007, by the chief guest of the occasion Mr. K. Ram Bagaria, Joint Director (IB), Ministry of Home & Affairs, Govt. of India.

AKSHAY URJA DIVAS 2007

SKIT's Renewable Energy Sources Club celebrated Rajiv Gandhi Akshay Urja Divas- 2007 on August 20, 2007. On this occasion a paper presentation contest was organized, which covered up the areas like, Renewable Energy, Solar Energy, Economic Imports of Bio-Fuels, Wind Energy, Hybrid Vehicles, Bio-energy from agricultural and industrial residue, Energy Plantation and Waste Land Utilization and Wind Solar Hybrid System. Mr. Alok Mathur, Reader, Dept. of Mechanical Engineering, was the chief guest and judge for the occasion. First and second prizes were bagged by Jasraj Singh (V Sem., CS & E) and Badal Gupta (VII Sem., ME) respectively.

TOASTMASTERS OFFICERS TRAINING ATTENDED

Mr. Narendra Kumar, VP Education, and Ms. Preeti S. Kurup, Secretary, of SKIT Toastmasters Club attended an Office Bearers Training Workshop on July 15, 2007. The training dealt with the responsibilities of office bearers, goals of Toastmasters Clubs as designed by Toastmasters International and the means of realising these.

TOASTMASTERS INTERNATIONAL **OVATION-2007**

Several members of SKIT Toastmasters Club attended Toastmasters International Ovation-2007, organised by Toastmasters International on 18-20 May 2007 at India Habitat Centre, New Delhi. Kiran Bedi and Shiv Khera were the chief speakers for the occasion. The workshop also witnessed various discourses on communication and leadership skills.

SEMINAR OF LIBRARIANS HELD

Jaipur Library and Information Society (JALIS) and Swami Keshvanand Institute of Technology (SKIT) jointly organized a Seminar-cum-Librarian's Meet on 12th August, 2007 at SKIT, Jaipur on the eve of the birth anniversary of the father of Library Science Dr. S.R. Ranganathan. The theme of the seminar was "I.T.

Applications in Libraries and Information Centers."

This seminar witnessed a number of papers on diverse issues related to library and information services.

SKIT GROUP LAUNCHES TWO NEW COLLEGES AND INTRODUCES PG COURSES AT SKIT

Encouraged by the success of Swami Keshvanand Institute of Technology, Management and Gramothan, the SKIT Group has launched two new Engineering colleges namely - 'Vivekananda College of Engineering' and 'Vivekananda Institute of Technology' both at Sisyawas-Dantali, NRI Road, Jagatpura, Jaipur (Raj).

Courses & Intake of Students at the Two New Engineering Colleges					
Courses	Vivekananda College of Engg, Jaipur	Vivekananda Institute of Technology, Jaipur			
Electronics and Comm. Engg.	60	60			
Computer Science & Engineering	60	60			
Information Technology	60	60			
Civil Engineering	60				
Electrical Engineering	-	60			
Total Intake of Students	240	240			

Prof (Dr) Rai Singhani and Prof (Dr) T.C. Jain have been appointed as the founder principals of VIT, Jaipur and VCE, Jaipur respectively. The campus of these colleges is spread across 30 acres of land which is surrounded by JDA approved residential colonies and proposed Medical City of Reliance Industries Ltd.

Post-graduate courses (M. Tech.) are expected to be introduced at Swami Keshvanand Institute of Technology, Management & Gramothan (SKIT) in the areas of Electronics and Communications Engineering and Computer Science & Engineering from 2008-2009 session with an intake of 18 students in each course.

nostalgia prevails

FILLED UP WITH GLEE & GRIEF

Looking back at the four marvelous years I have spent with SKIT family, I feel a lot changed as a person. When I first came to this college, I had the aim of becoming an engineer with a reputed and paying job. Thanks to the system now this aim has transcended beyond and to being a better person with a wider prospective of life.

Today my heart feels like an Indian Chief filled up with both glee and grief. The glee of covering my college life so wonderfully. But grief of leaving those fun-filled moments now. Grief of leaving friends I had made in these marvelous four years. Grief of leaving the discipline we followed and the pampering we enjoyed. Remembering discussions which went on for whole night, sometimes learning, sometimes entertaining. Then going to the college next day washing face after every lecture. But still sitting and taking down all those notes. The enthusiastic faces at the time of PRAVAH and that running from one event to another. The experiences we gained from our seniors. The experiences we imperatively give to our juniors. These things are unforgettable and remain embedded in mind as memories.

I would like to thank all my teachers, batch-mates and juniors before changing my status from a student to an alumnus of this wonderful institution. Thank you all for making us what we are.

In the end I will like to wish "Best of luck to all the sprouting engineers from SKIT."

-- Mitul Bhatnagar

IV BE, CS & E

HOW NICE THE COMING DAYS GONNA BE...

Four years of exhilarating expedite engineering with an array of introductory, intermediary, luminary. . . . Years came to end with a lot of fun, gossip and rollick. Insipid in the beginning, interesting to the middle, became responsible and beautiful to the end. Brought us laurels and language but left us alone with musical memories coupled with persons and placements. I am unaware whether it is a 50-50 relation but I do call this as 70-70 as I consider the overlapping region.

Irked by the cacophony of campus buzz words INFOSYS, WIPRO, TCS... the session after placement, waiting for the welcome call from the company to join is very placid and serene. The busy schedule of college bus timings, class works, exams and results is no more. Spending most of the time with friends (hostelliers...), new releases, late night roaming by jumping hostel walls (though I did it rarely), computer games, parties, and the Guppalogy sessions made

the daily routine. This leisure reminds me of "An idle man's mind is a devil's workshop". Anything not like devil and devine, but an idle brain makes ourselves get rejuvenated and brings our hidden thoughts and interests into light as the one I am doing now. Only when the mind is still and there is no anticipation creation comes. As long as you are looking forward to an experience, you are pursuing an achievement.

The city seems deserted of fresh and young graduates as they are wandering of obvious reasons. It is a many-way junction after our engineering from which we can choose the best and appropriate option for our career. Either it is the critical CAT or the mighty MS or the glaring GATE or an IT MNC JOB.. .sounds good and great. One of our teachers used to say, preparation is crucial and he also adds Preparation = purpose + planning + principle + practice + perseverance + patience + pride.

Till the time this article gets published most of them will have already joined, many will be on vacation, and some will be waiting for the call from the company and to my sorrow few will be still searching and they are 'in a hunt'. A hunt for a purpose, a hunt for knowledge, a hunt for stomach, a hunt for a career and a hunt for a life". At times my inner self asks me "Have I become lonely?" With a bit of pain I answer by saying that my

nostalgia prevails

days were transformed from my long chats to limited, my friendly touches to mystic imaginations, my distant walks to a simple exercise, my longest rides to a few kilometers, my admission name into the alumni list and my text books to home decorators....

The vivacious and lively memories put me back into elegant engineering life. Spending days with all these vulnerable memories and hoping for a bright future ahead, I put my hand on my naïve cheeks looking into the galaxy starting my imagination "WOW!!! HOW NICE THE COMING DAYS GONNA BE...."

-- Saurabh Maheshwari

IV BE, CS & E

JOURNEY TOWARDS DESTINATION

A journey which starts for many as a choice of second fiddle, becomes the most adventurous and enjoyable of their life's. I was no alien to the concept. SKIT started as of an accident but turned out to be an adventure for my life. I reached SKIT as a mock follower to one of my dearest friend, who was a priceless possession and whom I would not have let go under any circumstances. I chose to be just a follower because I believe every discovery starts with a risky expedition with success as the only goal. So similarly I started my discovery, a journey towards my destiny. But my discovery journey was different from Vasco Da Gama or Amerigo Vespucci as I had no

second chance and constraint was of four years (until I show extra love with some subjects and keep repeating it).

First few days in any college are really contrasting to Coulomb's law which states that "Like charges repel and opposite charges attract" as in initial days of college opposite (seniors) repels and similar (1st year students) attracts. But my experience was quite unique as I bonded with super seniors initially (my room in the hostel was on the same floor at which 4th yearites were staying), and as it is said "A friend of America is friend of the world," so rest of the seniors followed the protocol and my journey became hiccups free.

Apart from all the senior junior hooplas, the partners (friends) in all mischief and fun were made in initial college days and preserved till now and hope most of them will continue to be partners in all the future intrigues even after crossing the boundaries of SKIT.

Moreover, experience in the hostel was simply fantabulous. Though the days always started in fragments right from 7 O'clock in the morning but there is was no upper limit for night. A table tennis match at 2 O'clock in the night or knocking doors at 3 O'clock to ask something to eat are few common experiences at the hostel. Mutual help in solving the assignments, group study during examinations are few disadvantages of the hostel life (as per me) as it doesn't allow an individual to go under the

"pressure test" all alone.

The four-year journey's description would be incomplete without the mention of the most frequented places like Indian Spice, NTM, Domino's, Café Coffee Day (CCD) etc. Sometimes I feel may be my teachers know me less than the CCD guys as the teachers taught me just for few months but at CCD they served me for four years at least 2-3 times a week.

Jokes apart the biggest strength of my college is the teachers. The teachers apart from being intellectuals are very caring and understanding. I really owe my stage presence and college level anchoring, and self confidence to the college extra curricular teachers and especially to Ms. Kalpna Tomar (ex-Lecturer). I am really thankful to the teachers who chose me to be a part of different endeavors through out the college life.

Lastly, was I right to follow my friends blindly in choosing SKIT? Did I strike gold in my destiny expedition in SKIT? It would be too early to say as I have collected many glittery substances in my journey (which would be tested in the laboratory of life to prove their worth). Leadership skills, team work, strict discipline, ethics and etiquettes and exposure are among the few substances which I have collected just being part of this institution. Working under pressure (by not doing my work till last day of deadline), one night stand with books before exams, umpteen number of friends and a thing

nostalgia prevails

called college life was something which I discovered myself in this laboratory which matures teenagers into adults and not to forget grooms them into engineers too.

-- Vivek Chandra Gautam IV BE, CS & E

SKIT PROVED ME WRONG

I completed my schooling from St. Xavier, Jaipur; dropped for two years for the preparation of IIT/JEE and landed up with SKIT, Jaipur.

Initially I thought I have no future left. I aimed for the best government college and got a private one ...one of the best private institutes as I was told.

Gradually in the very first year I realized why it was the best; the discipline and the regular lectures were the reason behind it. I was always fond of good standards in everything. I did not like studies much still wanted a good standard; and I got it.

Our first year block was totally separated from the main block with a direct access to the canteen, taking a good care of the freshers. There were well equipped laboratories for Chemistry and Physics; the best I liked was Communication techniques lab.

First year was over in escaping from ragging and accustomed with the college life. Management helped a lot in converting ragging into a healthy interaction with seniors who in turn guided us in many ways and gave us a freshers' party too!

By the time the management and

seniors became affable; now it was our turn to become seniors. I moved in the second year. Now I knew everyone and almost everyone knew me. Pravah'05 the techno-cultural fest, my first one, helped me a lot to establish myself.

Well, continuing with the tradition, we also interacted with our juniors in a healthy fashion and gave them a freshers' party too.

When I was in the fourth semester our immediate and intimate seniors were getting placed in various companies and after volunteering in a couple of placements two things were crystal clear in my mind:

- How to crack all the rounds of the recruitment procedure
- Our college will host many and would be invited in all the good centralized placements

With a stroke of luck, both of my assumptions proved right and I got selected in my very first campus in Tech Mahindra. Parents were overwhelmed and so was I.

Sixth semester was over with the placements and we had to bid farewell to our mentoring seniors with a grand farewell party, mementos and above all the sweet memories.

And now in the fourth year, awaiting our farewell when I look back, I observe many positive changes. College has expanded. Our first year block is changed into Pharmacy block. MBA course has

started. New girls' hostel is built. First IBM lab in Rajasthan is in our college and many more updatings to go.

Now I have a good future ahead, proving me wrong as what I felt in first year and I am happy that SKIT has proved me wrong. I can never forget SKIT's contribution in my life as it gave a rebirth to my dreams, aspirations and the professional attitude within me.

So my message to my juniors is the same as I was told in the first year: Have faith in your college and believe in yourself. Grab and utilize each and every opportunity in a fruitful manner and God will surely take care of the rest.

I thank you my alma mater. Thank you SKIT.

> -- Shikhar Srivastava IV BE, CS & E

When you face your fear, most of the time you will discover that it was not really such a big threat after all. We all need some form of deeply rooted, powerful motivation -- it empowers us to overcome obstacles so we can live our dreams.

-- Les Brown

Moral rules are directions for running the human machine. Every moral rule is there to prevent a breakdown, or a strain, or a friction, in the running of that machine.

-- C.S. Lewis

Muses' Arcadia

springs of the mount Helicon

WHO BE THE BETTER MAN?

(Awarded first in Poetry Writing Competition) At the crack of dawn, when the mist hangs in the air, When the vast countryside lies barren and bare. There stood a solitary figure near the temple door, Distant from the banter, distant from the furor. Hands folded in reverence, he prayed hard, And was about to leave, when he heard the bard.

Then the village priest came to his side and said, "Who are you, O! holy son of god?"

"An old timer, I have served my time, Wearing the olive greens, singing the national hymn." "Ah! What better time than now," retorted the priest, "To purge your soul of its gory sins, to tame the beast."

"What sins do you talk about my dear sir?" He replied, "I haven't offended god, so I have nothing to hide." "Now you shall teach me what evil is and what is not," Said the priest flying into a rage, visibly distraught.

At this, the soldier gave the priest a warming smile, And the other shot a look in his direction, one filled with bile.

"Yes I've bathed in blood, sometimes of my own distant kin, If that's trespassing, if that in your eyes is sin. Then I am the greatest sinner the world will live to see, I've fought long battles to set the soil that you call yours, free. And that's why I come here to plead for peace today, For love to blossom, for harmony, I pray. For days without end, I've braved hunger and greed, Waited lonely hours, thought only of the men I had to

I've held onto my wounded, dying comrade, When into the dust, every sign of hope would fade. Swallowed pride and fear in the wake of my land's call." Retorted the soldier...in his heavy rural drawl. Silent fell the winds, the birds, the trees, The priest now beset with love, bowed down to his knees. "May goodwill befall our land," he said and walked away, He became their unsung hero, venerated by all to this very day.

--Srishti Banerjee III BE, IT

HOPE

The sands of time, run away in water, My foot prints, temporary, they slither I walk, with thousand promises in heart The twilight atmosphere, I will start ... The birds chip, I hear them intertwined, The sun rises amidst I shine I have no heart, no feeling, no more to bother I am myself today, after long time I tatter I bite my lip, I smile inwardly, I have yes! no feeling to bind we profoundly I'm free to reach the height I wish, at to be, Hope is all, I give today to thee...

-- Nistha Jain III BE, CS & E

TIME WILL SET ME FREE

Time will set me free, For I am a traveller with no shady tree, Walking along the path of life is tough, The roads have curves, they are long and rough Peace and solitude no way to be found, Life is even worse than a hound, Work is to be done day and night What else is life but a constant fight. Things that attract us are tough to get, without them we cannot set. Hope and despair invade our minds, They give us courage of unmatched kind. The zeal and enthusiasm push us ahead, They remind us of the roads to tread. The hectic world, so boring alas, We have to live here till our last. I wish I was born free as a bird, which moves about in its own world, No fear, No worries, No anxiety in his life, Life for him not a constant strife.

springs of the mount Helicon

I wish I was born vast as a cloud, Gives to us the life giving light. But since I am born a petty human, I wish the time will set me free.

> -- Happy Garg I B.Tech., CS & E

REMEMBER ME, FORGET ME NOT

Don't worry about this heart of mine, I wish I could scream out loud; That "I don't want to lose you" I wish I could say to you, Don't go... For miles we may apart We may depart but friendship is an art, To be kept in a heart. Good-bye is a little word, That often causes pain, Remember we are friends. And hope to meet again. Shakespeare I am not, Could not write a lot. In five words of mine. REMEMBER ME, FORGET ME NOT...

> -- Saurabh Mittal I B.Tech. (EE)

PAIN OR WAY TO HAPPINESS

When someone is in pain
When someone is in panic, in sorrow
no hopes, mourning...
life becomes tough.
Can't carry on ... its so dull!
At that time only
When someone feels
lonely about himself
Starts judging his own self
what I am?
Am I what I am?
Am I what I want to be?

When someone is in pain
When someone is in panic
these are the golden hours
of his life
when he starts thinking of God

And all his past deeds
The questions that arrive ...
Have I done all right?
Or why am I at deprive?
or should I change myself,
my deeds, my needs?
For gaining true happiness
for becoming what I want to be
for being on the right track
but why, why only?
When someone is in pain ... in panic!!

-- Samta Sanghi BE IV Sem (CS & E)

A CREED TO LIVE BY

Don't undermine your worth by just following others
It is because, we are different and each of us is special.
Don't set your goals by what others deem important
only you know what's best for you.

Don't let your life slip through
your fingers by living in past, or future
By living one day at a time
You live all the days of your life.
Don't give up when you still have something to give,

Don't give up when you still have something to give,
Nothing is really over until you stop trying
Don't be afraid to admit your less-than-perfect
It is this fragile thread that binds us together
Don't be afraid to encounter risk you face
It is by taking chances that we learn how to be brave.

-- Tisha Tejawat III BE, IT

I'M WHAT I PRETEND TO BE...

Maverick, they call me, who don't know me
I stand shunned, and let the remarks be
for who cares today, I ponder
For the worldly bliss, shudder
I roam, jump I skip and I act
I behave as if, the world doesn't react
Hypocrisy, mesmerizing, aspersions, I don't believe...
For I make my own way, let no the deceive.
I'm no benchmark, I stand independent and free
For the people to know, I'm what I pretend to be...

-- Nistha Jain III BE, CS & E

The Governing Council





Surja Ram Meel Chairman



Raja Ram Meel Chief Patron



Anil Bafna Vice Chairman



K.R. Bagaria Director



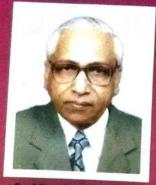
Prof. (Dr.) S.L. Surana Principal & Member Secretary



Mrs. Rachna Meel Registrar







Prof. (Dr.) S.L. Surana Prof. (Dr.) N.K. Banthiya Prof. M.L. Bhargava
Head, Dept. of ME
Head, T&P Cell







Alok Mathur Reader, Dept. of ME



A.S. Poonia Reader & Head, Dept. of E&CE



Anil Chaudhary Reader & Head, Dept. of IT



C.M. Choudhary Reader & Head, Dept. of CS&E



R.K. Pachar Reader & Head, Dept. of EE





Dr. Archana Saxena Reader & Head, Dept. of Chemistry



Vinod Kataria Reader, Dept. of E&CE



Dr. Rohit Mukher Reader & Head, Dept. of Math

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a Vyas Chemistry



Dr. Pramila Bafna Reader, Dept. of Humanities



Dr. Y.C. Sharma Reader, Dept. of Physics



Dr. Amber Srivastava Reader, Dept. of Mathamatics







Dept. of Physical Sciences & Humanities







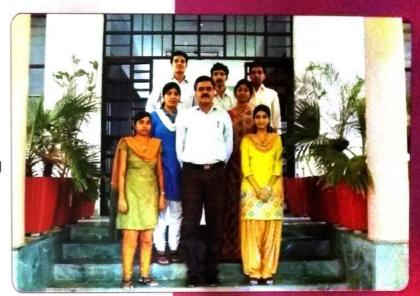
Dept. of Enginee

chanical

Some of our Erudite Faculty † Committed Staff



Dept. of Electrical Engineering





Dept. of Management Studies

Office, Accounts and other Staff











Awards Of Academic Excellence-2008



Poonam Singh, IV B.E., Information Technology receiving Prof. R.S. Nirjar Academic Trophy

Neha Anand, III B.E., E&CE receiving Prof. Alam Singh Academic Trophy





Bharti Goyal, II B.E., CS&E receiving Chief Patron Raja Ram Meel Academic Trophy

rformance Appreciation Awards-2008





Sarfaraz Nawaz, Lecturer, EE receiving appreciation award from Hon'ble Justice Mr. Chatra Ram Meel

Shilpi Gupta, Sr. Lecturer, CS&E receiving appreciation award from Hon'ble Justice Mr. Chatra Ram Meel





Mahendra K. Beniwal,
Sr. Lecturer, CS&E
receiving appreciation
award from
Hon'ble Justice Mr. Chatra Ram Meel

Sonali Singh, Sr. Lecturer, EE receiving appreciation award from Hon'ble Justice Mr. Chatra Ram Meel





Our Proud Culminations Some of our outgoing students



Computer Science & Engineering







Information Technology

Electronics & Communication Engineering



roud Culminations Some of our outgoing students





Computer Science & Engineering

Electrical Engineering





Electronics & Communication Engineering



Our Proud Culminations Some of our campus-recruited students (2009 batch)

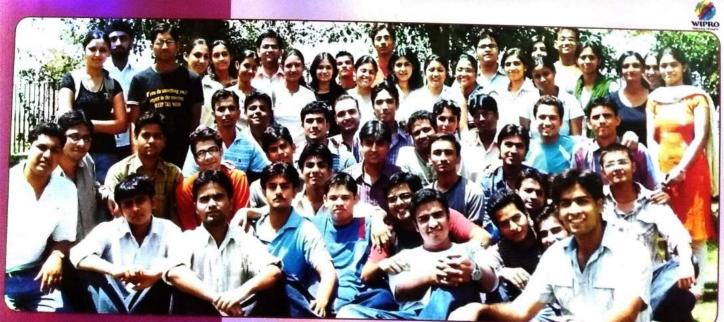
Infosys"











01 Some

oud Culminations campus-recruited students (2008 batch)







Infosys'







5 Birlasoft



SANJLET (2009 Batch)





Our Proud Culminations Some of our campus-recruited students (2008 batch)















conquer the heights

SILENT MESSAGES CAN MAKE OR BREAK YOUR FIRST IMPRESSION IN INTERVIEW

"First impressions are lasting impressions."

"The first impression is the only impression that counts and the only one that lasts."

"You only have one chance to make a first impression."

Such sayings hint at the importance of your image, or your "silent message." In short, how you carry yourself -- physically, emotionally, and intellectually -- is a key to charisma because it profoundly affects how people react to you in interview.

Image, of course, isn't everything
-- but it is important, especially if
backed up by strong performance.
And a negative first impression -saying the wrong thing, wearing the
wrong clothes, coming across as
uncaring or inept -- can cut off
chances even before they get started.

The big components of your emotional image are a positive attitude, enthusiasm, and self-control. Outlook, of course, governs outcomes, and optimists are more likely to be successful as well as inspiring.

This positive-ness is generally "inside" you, while enthusiasm, on the other hand is how you show it to others. The response you receive from the interviewers, in large

measure, your attitude.

Here I'm not suggesting that you put on a phony happy face but saying that every word, gesture, expression, and impression is being watched -- especially in initial encounters -- and will either help or hinder you.

Fostering "Pausitiveness"

For a sustained good image, you also must master what I call "pausitiveness." This means having the discipline to pause and put your personal feelings on hold even when tempted to blow your stack. Because even if you otherwise make a great first impression, if you allow yourself to be pushed over the edge, saying and doing things that you later regret, that's the "you" that will be remembered.

See how a smile can convey a great positive attitude? Smiling is just one of the silent messages you can send. There are so many different ways you can communicate elements of your personality, mood, attitude, or emotional state without ever breathing a word.

-- Prof. M.L. Bhargava

Head, Training & Placement Cell

BE FOCUSSED FOLKS... SUCCESS IS IN YOUR POCKET

A person approached Gautam Buddha and asked him if human beings can attain 'Moksha'. The Lord asked the person to see him the next morning. The next morning, Buddha asked the disciple to go into the town and find out what the people desired for themselves. The person met the citizens all through the day and returned to Buddha in the evening. He told the Lord that people in the town desired to have things like money, good job, good education, good health etc. etc. Buddha asked the disciple did anyone desire to have 'Moksha' and the answer of the disciple was in negative. The disciple got the answer to his query. Yes! to get something in your life you have to have a strong desire for the

A very few of us would have laid their bets on the Indian Cricket Team reaching the Finals of the T20 World Cup, forget about winning the same. However, the fearless and the young and enthusiastic cricketers did India proud and brought home the World Cup - a feat achieved after more than two decades. This feat was repeated in Australia when the Indian team smashed Australian team on their home ground. How did this miracle happen - You guessed it correct - the team played naturally, fearlessly. They focussed on their strengths and abilities, augmenting their performance through collective efforts.

Remember the success formula,

Performance = Ability x Motivation

You cannot remain fearless with a weak hand. Your level of motivation

backed by your ability will keep your fears at bay. Being fearless means you focus on your strengths and opportunities, you play to win and are not afraid to lose.

Nepolean Hill... (Laws of Success) refers to a poem,

What you Think, What You Are

If you think Weak, Weak You are,

If you think Strong, Strong You are...

And our forefathers have said, MAN KE HARE HAAR HAI, MAN KEJEETEY JEET...

So, do your own SWOT analysis...today and start working with your strengths, to further strengthen them and translate all challenges into opportunities.

Know your strengths: You will appreciate that the map of Jaipur city is even less than a bird's eye view of the city itself. The city in fact is much larger, bigger and vibrant than its map. Similarly your mapping of who you are is not what you really are. You are much more powerful, capable than your map. Devote some time for yourself and think about your qualities, capabilities, strengths and also your weaknesses and you will realize that what you see of yourself whether through your own eyes or what others make you see, is just a very small and tiny part when compared to what you actually are.

Focus on Your Strengths: Researches on mind and laws of attraction established that one can attract success by putting attention and intention to have it. Have a look at your achievements in life and you'll see that these are only those things, which you paid attention to. I can assure you, if you really focus on your studies, for which you have joined the Institute, you will actually succeed. Focus all your attention and energy on that one thing just like the karate expert when he is breaking the bundle of bricks.

Certified Behavioural Trainer and originator of Kushwaha's Mind Prof. Management Systems, S.K.Kushwaha, CHt.(USA) says, "SUCCESS IS CREATED AND CRAFTED," one can create it for oneself. Explaining the process he says, when we are in an undesired situation we start denying it (because we have trained our subconscious mind to react like this), but the moment we realise that there are other ways still available to address the issue, we start working on it and then mind creates the ways

Success is lived by everyone and happiness welcomed, however, worry can also be an excellent starter to focus, but mind that, it will surely bring to you what you do not want in your life as it has repulsion for the same. So change your focus to your strengths and on all such things you want in life. You will be surprised to see the changes entering in your life and it is manifested as reality.

Resistance is another way of focusing on things you don't want in life. The more you try to resist/ run away/ avoid the things; the closer you will get to those experiences in your life (Prof. Kushwaha says 'by

doing so one's mind creates such bad/unwanted things). Stop for a moment and ask yourself what would happen if you accept that thing/ feeling/ experience instead of resisting the same. You will immediately feel yourself at peace and there will be a sense of solace and those thoughts/ feelings/things which you have been resisting so far, will no longer haunt you.

How to do it (Practical Exercise): Focus on what you desire to increase/want in your life (eg. you want to be CEO of Infosys OR wish to get 9.99 CGPA on 10 point scale), create a mental image of the same, hold on tight to the image, do not let it fade in your memory, feel the emotions towards it as it will encourage you to take action and you will see that the process works, your mind will seek to develop the picture you have created. Here emotions are the driving force.

Focus will show you the way: By focus here I mean attention/ concentration coupled with emotions and a positive expectation of success. Focus will activate the power of your sub-conscious mind and you will begin to see the ways of achieving what you are focusing on. There is an old saying 'Where there is a Will there is a Way'. Here I never mean to say that you do nothing and success will automatically come to you by focusing your attention on the things of desire. When you focus with emotions, you see the way to achieve success and you will also get the guts to tread that path fearlessly,

just like the Indian Cricket team at the T20 World Cup.

Focus comes to us naturally. See a small child doing something, he/she would do it fearlessly/ without distraction and would not easily give up to your efforts to divert his/ her attention. But as we grow older, we give a back seat to this marvelous capability of ours.

You will be able to succeed/ perform better when:

- FYou know and believe in your strengths/skills/capabilities.
- desire - distraction/ fears will automatically be under control.
- "You attend to the task at hand rather than analyzing and criticizing your performance.
- You are relaxed and alert.
- "You think positively with all negative thoughts eliminated.

Go Ahead...

-- Praveen Choudhry

Training & Placement Officer

ELECTRICAL ENGINEERING

(The driver of the world)

Be it the comfort or the entertainment. Be it the communication or the computer world, each and every dimension of today's fast and developing world depends on electricity. And electricity is no Goddess or angel to spread its magic arms with itself. It needs drivers, controllers, modifications, transmissions and the most importantly, generations. And who does it all - The electrical engineer brigade. So, just give a thought to the vast opportunities that are available, with the vast growth of the electricity demand and need for development.

Students who choose Electrical Engineering these days, do it generally when they don't get their dream branch and are just interested in the college brand name. The reason behind this inferior treatment is the so called IT boom. Lets leave behind the branch selection, but surprisingly, even those, who are pursuing their BE from Electrical Engineering are interested in the IT companies. Some people may have the interest and strong desire, but most of them are just in a rat race.

Question is, what is misleading the young Electrical Engineers?

(i) They see very less core companies coming their way. (Myth)

The fact is, they need to be patient. There are many companies like L&T, L&T chiyoda, Adani groups, Saint Gobain, Reliance, Paul Wurth and many more, which conduct campuses.

Apart from them, if students start preparing from 2nd or 3rd year itself, the doors of the prestigious PSUS like NTPC, BARC SAIL, HAL, IOC, HPCL and many more are wide open. The papers are quite easy and its my personal experience.

(ii) Being placed is the only aim. (Myth) If you are placed, and placed at a company where after sometime you realise that you made a mistake joining this company. Then, moving back would be very very difficult.

(iii) They see better competition and better growth in the software sector. (Myth)

If you look at exams per week as competition, then I don't agree. The software companies are not creating competition. They are creating bench strength. They want more and more people, to chuck out more and people. The selection ratio in a software company with respect to a core company is 16:1. So, do you think that it is possible to absorb, this large number. NO, this does not happen. I've seen my seniors, my friends, leaving the companies, frustrated and lost. And remember, once the IT company has to remove employees, then it would first remove the professionals from ME, EE and would then take the turn to employees from computer origin.

The third and the final year are the peak times of career. If you take pains and read books thoroughly, the technical knowledge demanded could easily be managed. The thing which has to be kept in mind is the basic aptitude test. Face all companies aptitude test, face all GDs and read newspapers loudly to improve English. And still if you feel that by choosing EE, you have made a mistake, then prepare for MBA. Its hard to crack, but is much better than opting for the dangerous IT companies.

NOTE: All the above writing is based on my personal experience, the opinion of others may vary.

> -- Apurva Akash IV B.E., EE

Techingenius

technical flair of technocrats

HYBRID VEHICLES FUTURE OF AUTOMOBILE INDUSTRY

(Awarded first in Technical Article Writing)

INTRODUCTION

Have you pulled your car up to the gas pump lately and been shocked by the high price of gasoline? As the pump clicked past Rs20, Rs30, Rs40 or even Rs50, maybe you thought about trading in your car for something that gets better mileage. Or maybe you're worried that your car is contributing to the greenhouse effect.

The auto industry has the technology to address these concerns. It's the hybrid vehicle. There are a lot of hybrid models in the market these days, and most automobile manufacturers have announced plans to manufacture their own versions.

The big question is - Are hybrid vehicles the future of automobile industry?

DEFINITION

Hybrid vehicles are, by their very definition, vehicles which have more than one motor to power the vehicle. Typically, hybrids have two engines. One is an electric motor/generator and the other is a conventional gas engine. The electric motor is powered by a large battery pack, while the other engine is typically powered by gasoline.

Since the vehicle is being powered by two engines, hybrid vehicles tend to be more expensive than their conventional counterparts. Hybrid vehicles do not need to be plugged in. The battery packs can be recharged through regenerative braking and by the gas engine.

HISTORY

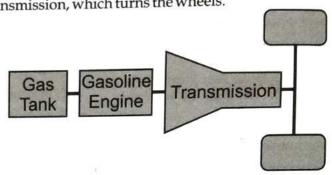
In 1899 Dr Ferdinand Porsche, then a young engineer at Jacob Lohner & Co, built the first Hybrid Vehicle or more specifically the first Hybrid Car which was named 'Mixte' after that there has been no looking back.

GASOLINE POWER VS ELECTRIC POWER

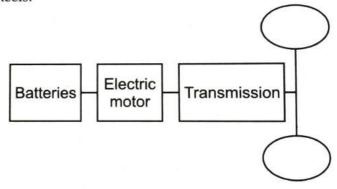
The gasoline-electric hybrid vehicle is just what it sounds like -- a cross between a gasoline-powered vehicle and an electric vehicle. Let's start with a few diagrams to

explain the differences between a gasoline-powered vehicle and a typical electric vehicle.

A gas-powered car has a fuel (gas) tank, which supplies gasoline to the engine. The engine then turns a transmission, which turns the wheels.



An electric car, on the other hand, has a set of batteries that provides electricity to an electric motor. The motor turns a transmission, and the transmission turns the wheels.



ELECTRIC CAR

The hybrid is a compromise. It attempts to significantly increase the mileage and reduce the emissions of a gas-powered car while overcoming the shortcomings of an electric car.

To be useful to you or me, a car must meet certain minimum requirements. The car should be able to:

- * Drive at least 300 miles (482 km) before re-fueling.
- * Be refueled quickly and easily.
- * Keep up with the other traffic on the road.

A gasoline car meets these requirements but produces a relatively large amount of pollution and generally gets poor gas mileage. An electric car, however, produces almost no pollution, but it can only go 50 to 100 miles (80

to 161 km) between charges. And the problem has been that the electric car is very slow and inconvenient to recharge.

A gasoline-electric car combines these two setups into one system that leverages both gas power and electric power.

GASOLINE-ELECTRIC HYBRID STRUCTURE

Gasoline-electric hybrid cars contain the following parts:

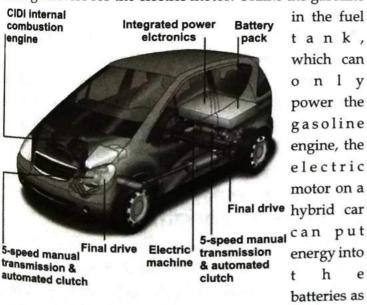
Gasoline engine - The hybrid car has a gasoline engine much like the one you will find on most cars. However, the engine on a hybrid is smaller and uses advanced technologies to reduce emissions and increase efficiency.

Fuel tank - The fuel tank in a hybrid is the energy storage device for the gasoline engine.

Electric motor - The electric motor on a hybrid car is very sophisticated. Advanced electronics allows it to act as a motor as well as a generator. For example, when it needs to, it can draw energy from the batteries to accelerate the car. But acting as a generator, it can slow the cardown and return energy to the batteries.

Generator - The generator is similar to an electric motor, but it acts only to produce electrical power. It is used mostly on series hybrids (see below).

Batteries - The batteries in a hybrid car are the energy storage device for the electric motor. Unlike the gasoline



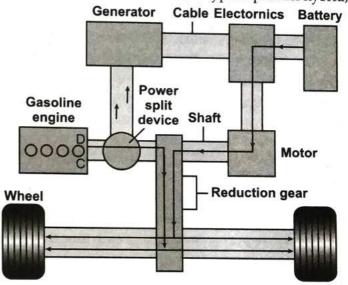
well as draw energy from them.

Transmission - The transmission on a hybrid car performs the same basic function as the transmission on a conventional

car. Some hybrids, like the Honda Insight, have conventional transmissions. Others, like the Toyota Prius, have radically different ones, which we'll talk about later.

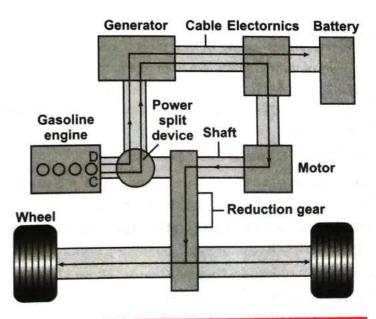
You can combine the two power sources found in a hybrid car in different ways. One way, known as a parallel hybrid, has a fuel tank that supplies gasoline to the engine and a set of batteries that supplies power to the electric motor. Both the engine and the electric motor can turn the transmission at the same time, and the transmission then turns the wheels.

The animation below shows a typical parallel hybrid,



both the electric motor and the gas engine can provide propulsion power.

By contrast, in a series hybrid (below), the gasoline engine turns a generator, and the generator can either



charge the batteries or power an electric motor that drives the transmission. Thus, the gasoline engine never directly powers the vehicle.

The structure of a hybrid car harnesses two sources of power to increase efficiency and provide the kind of performance most of us are looking for in a vehicle.

HYBRID VEHICLE PERFORMANCE

The key to a hybrid car is that the gasoline engine can be much smaller than the one in a conventional car and therefore more efficient. Most cars require a relatively big engine to produce enough power to accelerate the car quickly. In a small engine, however, the efficiency can be improved by using smaller, lighter parts, by reducing the number of cylinders and by operating the engine closer to its maximum load.

There are several reasons why smaller engines are more efficient than bigger ones:

- * The big engine is heavier than the small engine, so the car uses extra energy every time it accelerates or drives up a hill.
- * The pistons and other internal components are heavier, requiring more energy each time they go up and down in the cylinder.
- * The displacement of the cylinders is larger, so more fuel is required by each cylinder.
- * Bigger engines usually have more cylinders, and each cylinder uses fuel every time the engine fires, even if the car isn't moving.

The gas engine on a conventional car is sized for the peak power requirement (those few times when you floor the accelerator pedal). In fact, most drivers use the peak power of their engines less than one percent of the time. The hybrid car uses a much smaller engine, one that is sized closer to the average power requirement than to the peak power

CURRENT HYBRID CAR MAKERS

* Toyota / Lexus, Nissan, Honda, GM / Saturn / Chevy/GMC and Ford / Mercury

CURRENT (AND PAST) HYBRID CAR MODELS BEING SOLD:

* Toyota Prius, Toyota Camry Hybrid, Toyota

Highlander Hybrid, Lexus GS 450h, Lexus RX 400h, Honda Accord (retired), Honda Civic Hybrid, Honda Insight (retired), Ford Escape Hybrid, Mercury Mariner Hybrid, Nissan Altima Hybrid, Saturn Vue Hybrid (mild, going to full), Saturn Aura Hybrid (mild), Chevrolet Silverado Hybrid (mild, retired) and GMC Sierra Hybrid (mild, retired)

BENEFITS OF A HYBRID VEHICLE

You might wonder why anyone would build such a complicated machine when most people are perfectly happy with their gasoline-powered cars. Following are the benefits of Hybrid Vehicles:

- Lower fuel costs: The first thing most people notice on hybrid cars is the higher fuel economy. When you see numbers like 60 mpg, most are overwhelmed.
- * Lower emissions: Just by driving a hybrid, you are more likely to emit less pollution. Full hybrids let you drive on electric power (battery power) at low speeds, when gas engines are less efficient. The gas engine will kick in at higher speeds letting you get the best of both worlds. Hybrid cars take the top spots when it comes to green ratings.
- * Tax credit: Helping you feel better about paying more is the tax credit you may qualify for. Depending on which hybrid car you buy and your own financial situation, you may get several thousand taken off in credits.
- * Local Perk: There are some nice local perks, too. From free parking to HOV access to tax benefits.
- * They are here today: But mostly, what's nice about hybrids is they are here today. Unlike the fuel cell or E85 revolution, no new infrastructure is needed. No new pumps are necessary.
- * Feelings of doing good/less harm: It gives you a self satisfaction by not polluting the environment.

DISADVANTAGES OF A HYBRID VEHICLE

Every coin have two faces, same is the case with hybrid vehicles which have following disadvantages:

* Technological Advancement: Due to rapid development new technology will come very soon and the value of present vehicles will fall at a very fast rate. technical flair of technocrats

- Battery life is very less.
- Cost is high due to small production.

FUTURE ASPECTS

We will come across a lot of new hybrid vehicles in the near future. Some of these may be: Hybrid Airplanes, Hybrid Trains, Hybrid Ships, Hybrid Trucks, Hybrid Buses, Hybrid Two Wheelers and Hybrid Defence Vehicles

CONCLUSION

With the graph of crude oil prices rising exponentially, hybrid vehicles will become inevitable in the coming future. With Honda declaring the launch of Hybrid version of Civic in the later part of 2008 in India and government also lowering the excise rate for hybrid cars from 24 per cent to 14 per cent, we may soon see hybrid vehicles also running on the Indian roads.

We all will sooner or later have to buy these Hybrid Vehicles to save our mother earth and to get away with the problem of global warming and pollution.

Bottomline is -HYBRID VEHICLES ARE THE FUTURE OF AUTOMOBILE INDUSTRY.

> -- Jasraj Singh III B.E., CS & E

PHOTO SENSORS FUNCTIONING

Photo sensors are devices that produce some kind of response when radiation is incident on them. The response may be in the form of a change in an electrical parameter like resistance voltage etc. or even a chemical change.

Seniors can be classified in the different types depending upon the region of the electromagnetic spectrum they respond to or their principle of operation. These are classified into ultraviolet sensors, X-ray sensors, visible sensors and infrared sensors depending upon their response spectrum.

Most ultra violet sensors and many X-ray sensors are based on the principle of photoelectric emission and photo conductivity sensors based on the principle of gasphotoionisation are used in far ultra violet and X-ray wavelength ranges. Visible and infrared sensors include thermal sensors like thermo couples, thermistors and pyroelectric sensors in addition to photoelectric and photo conductive sensors such as photodiodes, phototransistors, photoconductors and photomultiplier tubes.

Based on the principle of operation photosensors are broadly classified into thermal sensors and photoelectric sensors. Thermal sensors absorb radiation and react to the resulting rise of the device temperature. Their response depends only on the absorption characterics of the device surface. Predominant thermal sensors include thermocouples, thermopiles, bolometers and pyroelectric

In photoelectric sensors, the device response is caused by direct interaction of the photons with the atoms. These include photomultiplier tubes, photo conductors, photo diodes, phototransistors, image intensifiers and so on. Photoelectric sensors can further be classified into imaging sensors and non imaging sensors. Non-imaging sensors simply measure the intensity and/or special distribution of an incoming beam of radiation, whereas imaging sensors also preserves the intensity versus position information in a two dimensional field of view. Photodiodes, photo multiplier tubes and photo conductors are all examples of non imaging sensors. Imaging sensors include image intensifier tubes, CCDs etc. Photoelectric sensors are based on the photoelectric effect, which is described as a quantum electric phenomenon where photoelectrons are emitted from device due to absorption of energy from electomagnetic radiation. The effect may be internal or external. Photo sensors with internal photo electric effect include photodiodes, phototransistors, photo SCRs, photo FETs, CCD devices and so on. Photomultiplier tubes and image intensifiers with external photoelectric effect.

Photodiodes: Semiconductors light sensors that generate current or voltage when the p-n junction in the semiconductor is illuminated by light of sufficient energy. When light with sufficient energy strikes the diode, it excites an electron, thereby creating a mobile electron and positively charged hole. If the absorption occurs at the depletion region, these carrier are swept from the junction by the built-in field of the depletion region, producing a photocurrent. Photodiodes can be operated in two modes, namely, photovoltaic and photoconductive. In photovoltaic mode of operation, no bias voltage is applied,

and due to the incident light, a forward voltage is produced across the photodiode.

In photoconductive mode, a reverse bias voltage is applied across the diode. This widens the depletion region, which in turn, leads to increase in the responsivity.

Depending upon their construction, there are several types of photodiodes. These include PN photodiodes, PIN photodiodes, Schottky-type photodiodes and avalanche photodiodes.

PN photodiodes comprise a p-n junction and are used for precision photometry applications. In PIN photodiodes an extra high-resistance insulation layer is added between the 'p' and 'n' layers to improve the response time. These features show low capacitance thereby offering high band-width and making them suitable for high speed photometry as well as optical communication applications.

In schottky-type photodiodes, a thin gold coating is sputtered on to the 'n' material to form a schottkyeffect p-n junction. These have enhanced UV response.

Avalanche photodiodes (APDs) are high speed, high sensitivity photodiodes utilising an internal gain mechanism that function by applying a relatively higher reverse bias voltage than PIN photodiodes.

Phototransistors: Solid state light sensors that can be viewed as photodiodes whose output current is fed to the base of a conventional small signal transistors.

Photo Silicon - Controlled

Rectifiers (SCRs) and phototriacs are light sensitive switching devices commonly used in opto couplers

CCD devices: A charge-coupled device (CCD) is an image sensor, consisting of an integrated circuit containing an array of MOS capacitors that can accumulate and store charge due to their capacitance. When the device is properly biased, the electrons see a potential well in which they can be trapped. The array is read out by transferring the charge from one MOS capacitor to its neighbour on one side by applying proper control voltages.

Photoconductors: Semiconductor photo sensors whose resistance decreases with increasing incident light intensity.

Vacuum photodiodes: Vacuum photodiode is the oldest photo sensor. It comprises an anode and a cathode placed in a vacuum envelope. The cathode, when radiated, releases electrons that are attracted by the positively charged anode, hence producing a photo current proportional to the light intensity.

Photo multiplier tubes: Photomultiplier tubes (PMTs) are extremely sensitive photo sensors operating in the UV, Visible and near IR spectrum. These have internal gain of the order of 108 and detect even a single photon of light. Their salient features include low noise, high frequency response and large active area.

Image intensifier tubes: Image intensifiers are device that amplify visible and near IR light from an

image so that a dimly lit scene can be viewed by a camera or eye. Contemporary image intensifiers comprise an objective lens, vacuum tube with photo cathode at one end, tilted micro channel plate (MCP) and a phosphor screen.

The objective lens focuses the image on to photo cathode of the vacuum tube. When the photons strike the photo cathode, electrons are released due to photo electric effect. These photo electrons are accelerated through around 5 kV into a tilted micro channel plate where secondary electron multiplication takes place.

All the electrons move together due to potential difference across the tube and for each photo electron, hundred or even thousands of electrons are created. Thus the screen converts high energy electrons into photons, which correspond to the input image radiation but with the flux amplified many times.

--Dr. Veenus Sisodia Head, Dept. of Physics

CYBORG

A cyborg is a cybernetic organism (i.e., an organism that is a self-regulating integration of artificial and natural systems). "Cyborg" is short for cybernetic organism, and is "the melding of the organic and the mechanic, or the engineering of a union between separate organic systems." The cyborg is often seen today merely as an organism that has enhanced abilities due to technology. One of the earliest uses of the term was by Manfred E. Clynes and Nathan S. Kline in 1960 to

refer to their conception of an enhanced human being who could survive in extraterrestrial environments.

A cyborg is essentially a manmachine system in which the control mechanisms of the human portion are modified externally by drugs or regulatory devices so that the being can live in an environment different from the normal one.

In 2002, under the heading "Project Cyborg," a British scientist, Kevin Warwick, had an array of 100 electrodes fired into his nervous system in order to link his nervous system into the internet. With this in place he successfully carried out a series of experiments including extending his nervous system over the internet to control a robotic hand, a form of extended sensory input and the first direct electronic communication between the nervous systems of two humans.

According to some definitions of the term, the metaphysical and physical attachments, humanity has, with even the most basic technologies already made them cyborgs. In a typical example, a human fitted with a heart pacemaker or an insulin pump (if the person has diabetes) might be considered a cyborg, since these mechanical parts enhance the body's "natural" mechanisms through synthetic ^{feedback} mechanisms. Some theorists cite such modifications as contact lenses, hearing aids, or intraocular lenses as examples of fitting humans with technology to enhance their biological capabilities. However, these modifications are no

more cybernetic than would be a pen, a wooden leg, or the spears used by chimps to hunt vertebrates

Cyborg is a hybrid of machine and organism, a creature of social reality as well as a creature of fiction. Social reality is lived social relations, our most important political construction, a world-changing fiction.

Fictional cyborgs are portrayed as a synthesis of organic and synthetic parts, and frequently pose the question of difference between human and machine as one concerned with morality, free will, and empathy. Fictional cyborgs may be represented as visibly mechanical or as almost indistinguishable from humans. Real cyborgs are more frequently people who use cybernetic technology to repair or overcome the physical and mental constraints of their bodies. While cyborgs are commonly thought of as mammals, they can be any kind of organism.

Uses Of Cyborg

1. Medicine

In medicine, there are two important and different types of cyborgs: these are the restorative and the enhanced. Restorative technologies "restore lost function, organs, and limbs" (Gray 1995). The key aspect of restorative cyborgization is the repair of broken or missing processes to revert to a healthy or average level of function. There is no enhancement to the original faculties and processes that were lost.

On the contrary, the enhanced cyborg "follows a principle, and it is the principle of optimal performance: maximising output (the information or modifications obtained) and minimising input (the energy expended in the process)." Thus, the enhanced cyborg intends to exceed normal processes or even gain new functions that were not originally present.

By 2004, a fully functioning artificial heart was developed. The continued technological development of bionic and nanotechnologies begins to raise the question of enhancement, and of the future possibilities for cyborgs which surpass the original functionality of the biological model.

2. Military

The "cyborg soldier" often refers to a soldier whose weapon and survival systems are integrated into the self, creating a human-machine interface. A notable example is the Pilot's Associate, first developed in 1985, which would use Artificial Intelligence to assist a combat pilot.

Military organizations' research has recently focused on the utilization of cyborg animals for inter-species relationships. "Cyborg insects" are being developed to transmit data from sensors implanted into the insect during the pupal stage. The insect's motion would be controlled from a MEMS, or Micro-Electro-Mechanical System, and would conceivably surveil an environment and detect explosives or gas. Similarly, a neural implant is also being developed to remotely control the movement of sharks. The shark's unique senses would be exploited to provide data feedback in

relation to enemy ship movement and underwater explosive.

3. Marine Cyborgs

"cyborg" not only The term applies to human beings, but to animals as well. Some of the best examples of such animal cyborgs come from the ocean. Technologies used range from simple radio transmitters attached for tracking purposes, to extremely complex surgically implanted electrodes used to record and manipulate behavior. Most "enhancements" added to marine organisms by human beings are small or implanted directly into the skin, and are created as to not disrupt their natural behavior patterns. DARPA, the Defense Advanced Research Projects Agency, is experimenting with surgically implanted electrodes in shark brains to learn more about their behavior.

4. In Sports

The cyborgization of sports has come to the forefront of the national conscious in recent years. Through the media, America has been exposed to the subject both with the BALCO scandal and the accusations of blood doping at the Tour de France levied against Lance Armstrong and Floyd Landis. But, there is more to the subject. Steroids, blood doping, prosthesis, body modification, and maybe in the future, genetic modification are all topics that should be included within cyborgs in sports.

The most commonly used steroid in sports is anabolic steroids. Athletes use it to enhance their

strength and performance beyond their natural means. Blood doping usually refers to three forms of adding red blood cells to the blood stream. The most common forms of prosthetics and enhancement we see in sports today are prosthetic legs.

Cyborgs Are Already Here:

1. Cyborgs actually do exist. About 10% of the current U.S. population are estimated to be cyborgs in the technical sense, including people with electronic pacemakers, artificial joints, drug implant systems, implanted corneal lenses, and artificial skin. A much higher percentage participates in occupations that make them into metaphoric cyborgs, including the computer keyboarder joined in a cybernetic circuit with the screen, the neurosurgeon guided by fiber optic microscopy during an operation, and the teen gameplayer in the local videogame arcarde.

2. This merging of the evolved and the developed, this integration of the constructor and the constructed, these systems of dying flesh and undead circuits, and of living and artificial cells have been called many things: bionic systems, vital machines, cyborgs. There are many actual cyborgs among us in society. Anyone with an artificial organ, limb or supplement (like a pacemaker), anyone reprogrammed to resist disease (immunized) or drugged to think/behave/feel better (psychopharmacology) is technically a cyborg.

--Nistha Jain -- Neetu Choudhary III B.E., CS & E

GREEN CLEAN ENERGY: OUR MORAL RESPONSIBILITY TO FUTURE GENERATIONS

The term green energy is used to describe sources of energy which are considered environmentally friendly and non-polluting. Green energy is commonly thought of in the context of electricity, heating and co-generation, and is becoming increasingly available. Consumers, businesses, and organizations may specifically purchase green energy in order to support further development, help reduce the environmental impacts associated with conventional electricity generation, and increase their nation's energy independence. Several working definitions are used for green energy. These include: (i) an alternate term for renewable energy; (ii) energy generated from sources which do not produce pollutants, e.g. hydro, solar, wind and wave energies; (iii) energy generated from sources which produce low amounts of pollution; (iv) energy that is produced and used in ways that produce relatively less environmental impacts.

Because the green energy sources are often low-polluting and environmentally sound, they are also considered clean technologies. Alternative energy is another term which is often used interchangeably with renewable energy. It suggests a non-polluting, non-fossil fuel source. Green power is sometimes used in reference to electricity generated from "green" sources.

Brown energy is sometimes used to contrast non-renewable or polluting energy sources with green energy.

Green sources

Green energy includes natural energetic processes that can be harnessed with little pollution. Anaerobic digestion, geothermal power, wind power, small-scale hydropowers, solar power, biomass power, tidal power and wave power fall under such a category. Some definitions may also include power derived from the incineration of waste. Medium or large-scale hydroelectric power or sources of air pollution, such as burning biomatter or petroleum, consuming water, are often excluded from the label 'green energy'. No power source is entirely impact-free. All energy sources require energy and give rise to some degree of pollution from manufacture of the technology.

Purchasing green energy through the electrical grid

In several countries with common carrier arrangements, electricity retailing arrangements make it possible for consumers to purchase green electricity (renewable electricity) from either their utility or a green power provider. The customer can pay a small premium or buy it cheaper than fossil or nuclear electricity, for that one has to pay carbon or environmental taxes. When energy is purchased from the electricity network, the power reaching the consumer will not necessarily be generated from green energy sources. The local utility company, electric company or state

power pool buys their electricity from electricity producers who may be generating from fossil fuel, nuclear or renewable energy sources. In many countries green energy currently provides a very small amount of electricity, generally contributing less than 2 to 5% to the overall pool. By participating in a green energy program a consumer may be having an effect on the energy sources used and ultimately might be helping to promote and expand the use of green energy. They are also making a statement to policy makers that they are willing to pay a price premium to support renewable energy. Green energy consumer either obligate the utility companies to increase the amount of green energy that they purchase from the pool (so decreasing the amount of non-green energy they purchase), or directly fund the green energy through a green power provider. If insufficient green energy sources are available, the utility must develop new ones or contract with a third party energy supplier to provide green energy, causing more to be built. However, there is no way the consumer can check whether or not the electricity bought is "green" or otherwise.

Purchasing green energy through the gas grid

The market for heating is mostly serviced by gas and oil rather than electric power, due to the high cost per kilowatt of electricity in many countries. Distribution of cheap renewable electric power via the electrical grid has made it possible in many countries for the average

consumer to choose renewable electric power, and in the same manner bio-natural gas may in future be made available to the average consumer via the existing natural gas grid. Those not satisfied with the third-party grid approach to green energy via the power grid can install their own locally-based renewable energy system. Renewable energy electrical systems from solar to wind to even local hydro-power in some cases, are some of the many types of renewable energy systems available locally. Additionally, for those interested in heating and cooling their dwelling via renewable energy, geothermal heat pump systems that tap the constant temperature of the earth, which is around 7 to 15 degrees Celsius a few feet underground, are an option and save money over conventional natural gas and petroleum-fueled heat approaches.

--Pushpendra Choudhary

I B.Tech., E & CE
--Dinesh Singh Shekhawat

IB.Tech., ME

RAIN WATER HARVESTING

What is Rain Water Harvesting:

Rainwater harvesting is the gathering, or accumulating and storing of, rainwater.

Do not dam a river, and block its flow neither boost water out of the ground, and suck the earth dry. Nor build canals, lay kilometers of pipes, but merely harvest the rain.

Need of Rain Water Harvesting:

Due to great level of extraction from rivers most of India's river basins have degraded and the rivers are polluted.

Large dams are the major source of water storage, and canals are the major distributory route. The former have caused large-scale community displacement and ecological havoc the latter large-scale degradation of land via soil salinisation.

Ground water sources are increasingly getting depleted or are getting polluted. Borewells are either silting up, getting short of water or are drawing polluted water.

Mismanagement of water has created a crisis panic and water riots in cities like Jamnagar and Rajkot in Gujarat.

Rivers which have been lifeline of the country from ancient times have now become polluted to such an extend that they are not fit for any use.

Rain water harvesting system:

Components

- 1. Catchments: The catchment of a water harvesting system is the surface which directly receives the rainfall and provides water to the system. It can be a paved area like a terrace or courtyard of a building, or an unpaved area like a lawn or open ground. A roof made of reinforced cement concrete (RCC), galvanised iron or corrugated sheets can also be used for water harvesting.
- 2. Coarse mesh at the roof to prevent the passage of debris.
- Gutters: Channels all around the edge of a sloping roof to collect and transport rainwater to the

- storage tank.
- Conduits: Conduits are pipelines or drains that carry rainwater from the catchment or rooftop area to the harvesting system. Conduits can be of any material like polyvinyl chloride (PVC) or galvanized iron (GI), materials that are commonly available.
- 5. First-flushing: A first flush device is a valve that ensures that runoff from the first spell of rain is flushed out and does not enter the system. This needs to be done since the first spell of rain carries a relatively larger amount of pollutants from the air and catchment surface.
- 6. Filter: The filter is used to remove suspended pollutants from rainwater collected over roof. A filter unit is a chamber from rainwater collected over roof. A filter unit is a chamber filled with filtering media such as fibre, coarse sand and gravel layers to remove debris and dirt from water before it enters the storage tank or recharge structure. Charcoal can be added for additional filtration.
- Storage facility: There are various options available for the construction of these tanks with respect to the shape, size and the material of construction.

(Shape: cylindrical, rectangular and square; Material of construction: reinforced cement concrete (RCC), ferrocement, masonry, plastic (polyethylene) or metal (galvanised iron) sheets are commonly used; Position of tank: depending on space availability these tanks could be constructed above ground, partly underground or fully underground.)

Some maintenance measures like cleaning and disinfection are required to ensure the quality of water stored in the container.

 Recharge structures: Rainwater may be charged into the ground water aquifers through any suitable structures like dugwells, borewells, recharge trenches and recharge pits.

Maintenance

- Just before the arrival of monsoon, the rooftop/ catchment area has to be cleaned properly.
- The roof outlet on the terrace should be covered with a mesh to prevent entry of leafs or other solid waste into the system.
- The filter materials have to be either replaced or washed properly before the monsoon.
- The diversion valve has to be opened for the first 5 to 10 minutes of rain to dispose off the polluted first flush.
- All polluted water should be taken away from the recharge structures.
- The depth of bores (of recharge structures) shall be finalised depending on the actual site condition.

--Naman Joshi I B.Tech., I.T.

EVOLUTION OF 3G MOBILE SYSTEM

Mobiles, the most widely used electronic gadget in today's life, is becoming more and more complex day by day. The history of evoluation of today's 3G mobile started with first generation.

First Generation

The first handheld mobile phone to become commercially available to the US market was the Motorola Dyna TAC 8000X, which received approval in 1983. Mobile phones began to proliferate through the 1980s with the introduction of "cellular" phones based on cellular networks with multiple base stations located relatively close to each other. Motorola introduced the first truly portable, handheld phone. These systems (NMT, AMPS, TACS, RTMI, C-Netz, and Radiocom 2000) later became known as first generation (1G) mobile phones.

Second Generation

In the 1990s, 'second generation' (2G) mobile phone systems such as GSM, IS-136 ("TDMA"), iDEN and IS-95 ("CDMA") began to be introduced. 2G phone systems were characterized by digital circuit switched transmission and the introduction of advanced and fast phone to network signaling.

Coinciding with the introduction of 2G systems was a trend away from the larger "brick" phones toward tiny 100-200g hand-held devices, which soon became the norm. This change was possible through technological improvements such as more advanced batteries and more

energy-efficient electronics, but also was largely related to the higher density of cellular sites caused by increasing usage levels.

Third Generation

Not long after the introduction of 2G networks, projects began to develop third generation (3G) systems and came up with standardized technology enforcing limits on capacity and indoor/outdoor data transfer rate.

During the development of 3G systems, 2.5G systems such as CDMA2000 1x and GPRS were developed as extensions to existing 2G networks. These provide some of the features of 3G without fulfilling the promised high data rates or full range of multimedia services. CDMA2000-1X delivers theoretical maximum data speeds of up to 307 kbit/s. Just beyond these is the EDGE system which in theory covers the requirements for 3G system, but is so narrowly above these that any practical system would be sure to fall short.

Unlike IEEE 802.11 networks, 3G networks are wide area cellular telephone networks which evolved to incorporate high-speed internet access and video telephony. IEEE 802.11 networks are short range, high-bandwidth networks primarily developed for data.

Features

The most significant feature of 3G mobile technology is that it supports greater numbers of voice and data customers – especially in urban areas – and higher data rates at lower incremental cost than 2G.

The .5 MHz channel carrier provides optimum use of radio resources for operators who have been granted large, contiguous blocks of spectrum. On the other hand, it also helps to reduce the cost of 3G networks while being capable of providing extremely high speed data transmission to users.

It also allows the transmission of 384 kbit/s for mobile systems and 2 Mb/s for stationary systems. 3G users are expected to have greater capacity and better spectrum efficiency, which allows them to access global roaming between different 3G networks.

3G Architecture

Mobile Station: It consists of a USIM, Mobile Equipment which provides UMTS Terrestrial Radio Access (UTRA)

BTs: Base Station, which creates a single cell

BSC: Base Station Controller, which controls roaming and channel allocations amongst various BSTs and is also referred to as a Radio Network Controller (RNC).

MSC: Mobile Switching Center, which performs the telephony switching functions and is usually connected to an SS7 network.

PDSN: Packet Data Serving Node maintains IP communications between all MNs and the Packet Data Network (PDN), which in this diagram is the internet.

Although 3G was successfully introduced to users in Europe, Asia, South America (Uruguay) and Africa, their use has not gained

technical flair of technocrats

expected momentum because of certain technological and financial limitations.

--Vinod Kataria, Reader, E & CE --Abhishek Vyas, VI E & CE --Mohit Agrawal, VI E &CE

I'M DANGEROUS: COLD DRINKS

The pH scale measures acidity & basicity of a substance. It ranges from 0-14. A pH of 7 is neutral, a pH less than 7 is acidic and a pH greater than 7 is basic in nature.

Normally the pH of drinks should be between 6 to 8. But generally cold drinks have pH value less than which can damage the body parts on excessive use. Nowadays there is a fashion in youth to drink several types of cold drinks which are in market. But they don't know their harmful effects.

pH value of some of beverages that we use everyday, was observed in our Environmental Engineering Laboratory. It is given below:

Pepsi	2.5
Thumpsup	2.15
Sprite	4.10
Mountain dew	4.25
Mirinda	4.18
7-up	3.80
Coke	2.5
Milk (sugar free)	6.5
Tea	
(without milk & 1 tea spoo	on tea in 1
small cup of water)	4.5
Coffee	
(1/2 tea-spoon in 1 small	
cup of water)	4.0

Lassi (sour)	4.24
Yeast (curd)	4.24
Pure Lemon juice	2.4
Applejuice	5.02
Orangejuice	4.02
Tomato juice	4.0
Vinegar	2.9

Now question arises how we can distinguish between harmful and not harmful drinks? It's answer depends on the pH value of that drinkable beverage.

This may be of immense interest to you. Have a look at the wrapper on a coca-cola 1.5 liters bottle and in the ingredients label you will find phosphoric acid in it. This chemical is a known slow poison of the caliber of arsenic.

Have you ever thought what you drink in an aerated drink? You gulp down carbon-di-oxide, when nobody in the world would advice you to drink carbon-di-oxide. Some months back there was a competition at Delhi University who could drink the maximum coke? The winner drank 8 bottles and fainted on the spot due to too much carbon-di-oxide in blood. Thereafter the principal banned all aerated drinks from the college canteen.

pH of citrus juices is also less like lemon juices. But citric acid is advantageous. The phosphoric acid present in cold drinks is highly injurious for our health.

There is lovely advertisement on T.V. in which the advertisers say that their cold drink is the best because it had very low pH. This means it is very acidic, but you would not drink it, if they told you that it was acid. I think that the advertisers thought that you must be stupid and you will use their cold drink because it has low pH.

Our body needs an optimum temperature of 37oC for digestive enzyme functioning. The temperature of cold drinks is very much below 37 degrees or even close to 0oC. This will dilute the enzymes and stress the digestive system. The food taken will not be digested. In fact it will be fermented. The fermented food produces gases, decays and becomes toxic, gets absorbed by the intestine, circulates in the blood stream and is carried to the whole body, developing into various diseases.

Did you know that soft drinks use chemicals in them that cause immense harm to you. Someone put a broken tooth in a bottle of a very popular cold drink and in 10 days it dissolved! Can you believe it? Teeth and bones are the only human parts that stay intact for years after death. Imaging what the drink must be doing to your soft intestines and stomach lining!

Be natural, have flavoured milk, tender coconut, butter milk, lassi, plain water instead of these "soft drinks."

-- Lokesh Pareta

I B. Tech., EE

(Guided by Dr. Sangeeta Vyas, Reader Chemistry)

Desire is the starting point of all achievement, not a hope, not a wish, but a keen pulsating desire which transcends everything.

-- Napoleon Hill

mirroring the inner being

THE IMPORTANCE OF INTELLECT

In the evolution of life on this planet, intelligence appeared only recently and is still unfolding, while the moral sense emerged still later and is growing even more slowly. In consequence, the ancient had to depend mostly on instinct and faith. But these primitive tools are now outmoded and we would be benefitted immensely by exalting intelligence and verified knowledge, as science has done.

Science began to make rapid progress when it replaced faith with intellect and shifted its reliance from opinion to fact and from discussion to observation and experiment. Modern Science owes its amazing success to the relentless application of the intellect to its investigations.

The scriptures of India have laid great stress on the development of the brain and the cultivation of knowledge. The Vedas have declared that intelligence is the character of life, the controller of the activities of man. They contain many prayers or exhortations for an enlightened, intellect, wisdom and knowledge. "May we attain to perfect understanding." "We ask for a brilliant intellect." 'Send us mental power and wisdom." "O! you desirous of being great, acquire knowledge."

A trained and enlightened intellect is necessary for spirituality. Loss of reason or intellect leads to rain, and the gods, when they wish to punish someone, do not strike him with a club but simply rob him of his intelligence. When he is pleased, he confers on him intelligence. In order to shower his grace on him he, dwelling in his heart, dispels the darkness born of ignorance by the shining lamp of wisdom.

It should, however, be remembered that intelligence, though essential for human welfare, is not synonymous with virtue. Like other powers, intelligence can be misused. Some very intelligent persons have been crooks. To guard against misunderstanding intelligence may be divided into three grades. Intelligence is noble or wholesome when it knows the path of works and renunciation. What ought to be done and what ought not to be done, fear and fearlessness, bondage and liberation. The intellect by which one understands wrongly, what should be done and what should not be done is of the medium grade. The intelligence by which one thinks wrong to be right and sees all things perverted is of the lowest grade.

A great deal of study and reflection, diffing and sifting is needed to get at the hardcore of natural truth. It is interesting to know that knowledge may also be classified into three grades. Knowledge of the highest grade sees unity in diversity, one imperishable entity, in all separate beings. It seeks to correlate ideas and objects which look disparate. It welcomes and promotes new thought, invention and discovery. It reconciles differences and sees all things as diverse aspects or forms of the same reality.

Knowledge of the medium grade regards the manifold existence and beings as separate and different from one another. It is indifferent to other truths and not interested in the growth of knowledge.

Knowledge by which one clings to each thing as if it were the whole, without reason, without grasping the reality, that knowledge is of the lowest grade. It exaggerates differences and is hostile to other knowledges and other entities. It discourages the advancement of knowledge.

As a rule the integrating view is, the higher view of higher theory harmonizes and combines the wave and quantum theories of light. Knowledge grows by discovering kinship or similarity among things and ideas which are apparently unrelated.

A clash of doctrines is not a disaster. it is an opportunity. In formal logic a contradiction is the signal of defeat, but in the evolution of real knowledge it marks the first step in progress towards a victory. This is one great reason for utmost toleration of variety of opinion.

The application of intellect to the problems of life requires every one to think for himself, to be a life long learner, progressive and inquisitive.

Like science, intellect must grow and develop by assimilating new mirroring the inner being

thoughts and eliminating beliefs and practices which have proved, factually incorrect or harmful. Renovation and innovation must be the moto of every live institution.

We must thank our intelligence for we are free to act as we choose. We are all the same subject to the natural order of things. Since we are part of nature, we must conform to its law.

> --Dr. Veenu Sisodia Head, Dept. of Physics

IF YOU CAN ... YOUR'S IS THE WORLD

(Awarded first in Philosophical and Abstract Articles Writing)

A small boy the fifth amongst seven siblings of a poor father, was selling newspapers in a small village to earn his living. He was not exceptionally smart at school but was fascinated by religion and rockets. The first rocket he built crashed. A missile that he built crashed multiple times and he was made a butt of ridicule. He is the person to have scripted the space odyssey of India single handedly. He is Dr. A.P.J. Abdul Kalam.

This is the quintessence of what enthusiastic and fervent attitude may lead you to. You have to be audacious and passionate to get your dreams fulfilled. All you may need from others is support and motivation. I would rather say that even if there is no one to motivate you, you yourself must move.

"No one can motivate you more than your desire to win."

A four year old girl - the twentieth of twenty-two children, contracted double-pneumonia and scarlet fever at a very early age, which paralysed her left leg. Thereafter at nine years of age she removed her leg braces and started walking without them. At thirteen she decided to become a runner but kept falling miserably in all races that she entered in. She kept trying in spite of several detractors and finally started wining every race she entered. She is Wilma Rudolph, who went on to win three Olympic gold medals.

There have been others also, who though being physically incapable retained in them their nimble and exuberant ideas and beliefs and succeeded in touching the sky.

None of these successful people was born with a silver spoon in his/her mouth. They were born in the same type of families like we are, so if they, with their zeal and passion, can transform the fate of the entire notion, so can we.

These examples lucidly imply that each individual has the ability to attain his dream and conquer the world. The major fact behind only a few people being successful in their life is that most of us find it easier to quit. There are two approaches to human nature: (1) You prefer to take what you get, (2) You settle for nothing but the best.

Sir Edmund Hillary had rightly said, "It is not mountains that we conquer but ourselves."

If you have a certain dream in

your life, then first of all develop the path to that goal in your mind that all of us mostly do, then secondly, maintain faith in yourself throughout that path, which none of us are able to do. The reason behind this being the fear of failure. "You are on the road to success, only when you realise that failure is only a detour." Further it is said that "A successful man is one who can lay a firm foundation with the bricks that others throw at him."

Another major reason for most of the people being unable to attain success is that they love having big dreams but along with that they have a feeling of their dream being too high a goal to accomplish. It must be kept in mind that "unless you spread your wings, you will never know how high you can fly." The best way to make your dream come true is to wake up."

In the end I would only say that if you have a dream, then just go for it. You yourself have to be the architect of your success. Finally ending up with the words of Mark Twain: "All you need in this life is ignorance and confidence, and then success is sure."

--Kushagra Gupta I B.Tech.

DEATH !!!

Normally life is portrayed as very nice, rosy and enjoyable by media. Generally in all the movies, the hero and heroine have all the good things in their life and even if there are some

problems, everything gets sorted out at the end and it looks that they live happily ever after. We are told by our parents that if we work hard and get a good job, we will become happy in life. But is it the case? If it is not, then what is the *reality*?

School children are thinking that once they get a good college, they will become happy in life. College students are thinking that once they get a good job, they will become happy. People in good jobs are thinking that once they get better company, they will become happy. People in top jobs are thinking that once they get married, they will become happy. Married people are thinking that once they have nice children, they will become happy and so on....

Search for happiness never ends and till death we live in the hope of searching happiness which is everyone's innermost desire. When desires get satisfied, they take the form of greed and when they are not satisfied, they take the form of anger. Greed never gets satisfied and keeps burning like fire in our hearts.

According to great philosophers like Socrates, Plato, Aristotle, Lord Buddha and saints like Jesus Christ, Madhvacharya, Lord Caitnya, Kabir Valmiki etc., life in this world is full of suffering. First of all we are born in this world which itself is very painful. Imagine the situation of the baby in the womb of the mother. Because of this painful birth, he comes out in this world crying. Then there is disease, old age and finally death, from which nobody is free. Even our advanced technology

cannot save us from them. And that is not all. According to the Bhagvad Gita, the Quran, the Bible, after death we are again born in a different body according to our Karma. Again there is old age, disease and death. Actually only the body takes birth and dies. We the spirit or soul remain eternal.

According to the Bhagvad Gita, in whatever state of mind one quits his body, he will get that body in next life. If someone is very sinful he will get an animal body and if someone quits his body thinking of God, he will get liberated from the chain of birth and death and go back to Kingdom of God.

Now one may think that this whole picture of life portrayed by saints and scriptures, though true, is very pessimistic. It is true that material is life very pessimistic. But there is a spiritual optimism. Scriptures say that if one follows the rules and regulations of scriptures like getting up early in the morning, chanting the holy name of God, worshiping the deity, offering food to the Lord and partaking the prasadam, then all the good qualities will develop in him automatically. He will be fully happy and satisfied in all circumstances, whether success or failure. His health will be good as a truly religious person does not indulge in intoxication, gambling, illicit sex and meat eating which are cause of so much anxiety. By following a life of simple living and high thinking he will pass this life very peacefully and happily. And at the end of his life if he quits his body remembering of the God then he will

not have to take birth in this world for another turn of suffering but he will go back to God for an eternal life full of bliss and happiness. This is possible only when we practice the process of remembering God throughout the life and make our life successful.

So life is meant to develop good virtues and qualities by spiritual living and restraining from sinful activities like meat eating, illicit sex, gambling and intoxication.

Live a Godly life and induce others to do so. That way everyone's heart will be purified and there can be peace and prosperity in the society. And even if one does not believe in the life after death, this life itself will become happy and peaceful.

So just like a student who prepares himself whole year for the annual exam, this human life is meant for preparing for death.

--Avinash Jangir I B.Tech., EE

SPACE AND TIME

We live in a Newtonian world. Before him Aristotle had said that the natural state of a body is to be at rest and it moved only if driven by a force or impulse. It follows that a heavy body should fall faster than a light one because it would have a greater pull towards the earth.

Galileo demonstrated that the Aristotle belief was false by dropping weights from leaning tower of Pisa. In Galileo's experiment, as a body rolls down the slope it always acted upon the same

force which showed that the real effect of force is always to change the speed of a body. This idea was firstly stated explicitly in Newton's principia mathematica published in 1687 which became Newton first law. It states that "a body will move and continue to move in a state of rest or motion unless an external unbalanced force is applied on it."

In addition to Newton's laws of motion, he discovered a law to describe the force of gravity, which states that each body attracts every other body with a force that is proportional to the mass of the body.

Newton's law of gravity also tells us that the farther apart the bodies, the smaller the force. It said that gravitational attraction of a star is exactly one quarter that of a similar star at half the distance. This law predicted the orbits of the earth, the moon and the planets with great accuracy.

The big difference between ideas of Aristotle and those of Galileo and Newton is that Aristotle believed in a preferred state of rest whereas for Newton there is no such state.

The lack of absolute standard of rest meant that one could never determine weather two events that took place at different times occurred in same position in space.

This idea also contradicts the idea of absolute time. The fundamental postulates of the theory of relativity, the best known are equivalence mass and energy, summed up in Einstein famous equation e=mc2 and the law that nothing may travel faster than

the speed of light. Because of the equivalence of energy and mass, the energy which an object has due to its motion will add to its mass.

For example at 10% of the speed of light an object mass is only 0.5% more than normal while at 90% of the speed of light it would be more than twice its normal mass. As an object approaches the speed of light its mass rises more quickly so it takes more and more energy to speed it up further. It can in fact never reach the speed of light because by then its mass would become infinite and by the equivalence of mass and energy it would have taken infinite amount of energy to get it there.

Question For Readers

Sometime we feel that what is going right now has happened earlier also. What is the reason?

We live in three dimension system, i.e., one for length second for breadth and third for height. So we can travel in length, breadth and height in our daily lives. Einstien said that at different places time is different. Each person sitting here has his own time, but the interaction is so much that we didn't feel the time difference. While we sleep our mind sometimes goes into fourth dimension and some part of our brain sees the future.

Fact

In our daily lives we use only 2 to 3 % of our brain the remaining 97% goes into waste.

Einstein used about 30-40% of brain while working in his laboratory.

Einstein travelling in a train:

Once a person named jack was travelling in a train, at another station a person wearing locket of Jesus Christ sat along with Jack. Jack told that person that God is nothing; people like Einstein have revolutionized the world, in spite of praying to God we must pray Einstein. The person who was wearing locket of Jesus Christ was Einstein himself.

TWIN PARADOX THEORY

Einstein gave twin paradox theory which says that if we take one of the twin in outer space and other remains on the earth then after some years the twin living on earth will age much more than that of the twin sent to live far away from the earth. This is because near the earth energy is high, so frequency is more and hence time period is little. As we move away from the earth frequency decreases and time period increases.

> --Vedant Swami I B. Tech. (CS & E)

The world is your mirror and your mind is a magnet. What you perceive is in this world is largely a reflection of your own attitudes and beliefs. Life will give you what you attract with your thoughts. Think, act and talk negatively and your world will be negative. Think and act and talk with enthusiasm and you will attract positive results.

-- Michael Lebeuf

we dare to think.

MEDIA HYPE: A NECESSITY OR TRP HUNT

Gone are the days, when we used to sit in front of our television sets with our family deeply engrossed into the proceedings of daily soaps. Everyone giving their own statements on what is going to happen next. But, that seems to be the thing of past. Now, the country is going through the transition phase. It is boom time in mass communication. That's why we see people glued to these news channels.

Earlier there used to be just one news channel, which provided news, quiet boring and just for an hour. So, if one misses it, its only chance to catch on to it was next day's newspaper. Some people do say, that today private channels are mushrooming at such faster rate that the day is not far, when news channels would outnumber the genuine news. Same is the case with newspapers. There are all kinds of newspapers in the market.

So, media hype has its negatives but the advantages of the hype generated by media outplay its limitations. Today, even a small kid is very much aware of what is going around in the country. People are going so much around knowledge that they seem have become omniscient. It has helped a lot in reducing the mishaps and accidents. People take every step with caution. Life is unimaginable without media. If we take the case of stock brokers, their whole business is dependent on

the stock news available on news channel.

The awareness quotient among the multitudes proliferated at a steady rate. Even paltry but essential news is analyzed so minutely that not even a single stone is left unturned. This is the biggest advantage of media hype. This competition among the media people is benign, as at the end of the day the commoners are benefitted. The media is a crux between the illiterate and literate, unaware and aware.

Any issue when undergoes such comprehensive analysis, one gets to know the inside story of the matter. This media mutiny does make a citizen aware, it gives him some extra knowledge. This makes the job of the media as well as the government very easy.

The uprising of a social issue, a minority community or a spicy gossip. All these mutinies against false practices are kindled by media (i.e. news channels, radio, newspaper, news magazines). Although, it's true that sometimes such small issues are blown out of proportion. But, then people are wise enough to decide what is correct, and what is incorrect. It's absolutely illogical to say that media is misguiding the masses. What media is doing, what its work is, the multitudes are not kids, that anybody can deceit them.

All those people who say that,

media channels provide news to increase their TRP ratings, show the hypocrisy in our society. It's a matter of concern and needs to be rectified. Such people vitiate the society, their main aim being, to suppress all those things which are righteous and work for the betterment of the society.

Media has become an integral part of our country. It has its negatives, but then the positives seem to uplift the society. So, the negatives can be ignored until and unless it overshadows the positives. Media hype is and surely will remain a necessity in our society.

--Sachin Sharma

III B.E., ME

Twenty years from now you will be more disappointed by the things you didn't do than by the ones you did. So throw off the bowlines, Sail away from the safe harbor. Catch the trade winds in your sails. Explore. Dream.

-- Mark Twain

"WITHOUT A GENTLE CONTEMPT FOR EDUCATION, NO MAN'S EDUCATION IS COMPLETE"

It was one of the days during my MBA studies when me and some of my colleagues, who were much elder to me and were from different countries too like Germany, China, Mexico and USA, indulged ourselves into this debate as to which country's PM is most educated? Just like everyone else who boasted of their country's PMs I boasted of

we dare to think

Manmohan Singh as being the most educated PM in the world as he has a number of doctorates to his name and in fact, a St John's College and University of Cambridge have honoured him by naming a PhD Scholarship after him, the Dr Manmohan Singh Scholarship. Then a colleague of mine, Guy (Pronounced as Gee) from Germany, put up an interesting question, which turned the debate on it head. The question was very simple: How to measure Education?? Is its with the number of Degrees a person has, or the number of PhD's one has to one's name? Or is it really, the all round development and grooming of a person that would pertain to the guidelines of being well educated?

In sync with the above debate I also recollect a story that I read in 'The times of India' newspaper, which goes like this: "Here was a man who dealt in scrap. He would buy junk and sell it off in local market. He used a donkey to transport the stuff. He would also buy old books for resale. All this, the donkey would carry on it's back.

The donkey previously belonged to a washer man and was used to carrying dirty clothes. But now the animal was 'promoted', carrying books of wisdom- volumes containing works of PhD students, Vedanta, yoga, fiction, history and science. So would you say the donkey was now a scholar, a sage?

What would you call people who have burdened their minds with such books? Books give you

information with which you load your mind. The donkey carried piles of books and continued to be a donkey, ignorant of true knowledge. Similarly, just by reading scriptures and other writings and course books, you cannot become wise or well educated."

It's the all round grooming that forms part of a good education which involves a number of variables, contributing to the process of learning, such as environment at home, in the college, with friends, in the class, with the juniors and seniors etc.

Now, if we relate an all round development building scenario to ourselves, we can easily judge that a statement, "lack of initiative by all" holds true. I would hold students equally responsible for not being able to properly voice their concerns and make the authorities realize that, "Yes! A fresh change is needed towards achieving a growth for both, the institute as well as the students. 'Brilliance' can definitely be groomed with an open mind and an attitude to change and upgrade incessantly."

Here's something to start with, "Just give a thought to 'student cooperatives' which would be fully controlled by students and would exist to support the Institute's management and help the institute grow and take up more challenges in future."

Now coming back to the debate, oh yes! I ended up making a good stand by letting everyone know that this man, Mr. Manmohan Singh, really applied his knowledge well and was able to reach such ranked position in the Indian Govt. and achieve so much in his life through his knowledge that he gained from books as well as his life experiences and his grooming.

Hence, one can certainly conclude that just filling up the mind with knowledge ends up contributing negatively to the society, whereas if the attained knowledge is applied well can prove immensely helpful as well.

As rightly said by G. K. Chesterton, "Without a gentle contempt for education, no man's education is complete."

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-- Vishal Meel

O.S.D., Department of Management Studies

VOTING: SHOULD IT BE LEGALLY MANDATORY

(Awarded first in Articles on Social Issues)

Voter turnout in India is getting worse. A few of the world's democracies have even worse voter turnout than India does, but not many. This is a national disgrace. With each new generation, it gets worse. There seems to be only one solution to this big problem: mandatory voting laws.

One need not dive very deeply into political theory to understand the relationship between citizens and their government, in particular we dare to think

in a democracy. It is a social contract. Why are citizens obliged to vote? Because government derives its authority from the consent of the governed. That consent must constantly be renewed - through voting. If citizens don't vote, the government loses its legitimacy. The primary reason people do not vote is that they do not see it as being in their self-interest. If there is nothing in it for them, why bother? Most eligible voters have never considered the need to think about the impact of voting on society.

Since so many people refuse to vote, why not make voting mandatory? Mandatory taxation provides a good analogy. As with voting, society as a whole relies on citizens' fulfilling their obligation to pay taxes. As a result, failure to pay taxes is met with civil and in some cases even criminal penalties. Why not treat voting the same way? Government cannot operate without taxes, and government should not operate without the consent of the governed, as expressed by their votes.

Some thirty-three countries - all democracies - have mandatory voting laws. In some countries, for example, mandatory voting laws are on the books but not enforced - nor do they need to be, since voter turnout is excellent. In these countries, the law simply sets a standard, one that most citizens live up to. In contrast, other countries, such as Australia, strictly enforce their mandatory voting law. In 1922, voter turnout in Australia went down to fifty-eight per cent. As a

result, government officials became concerned. By 1924, they had made voting compulsory. Now Australia regularly enjoys heavy voter turnout, even though the penalty for not voting is nominal.

The point against this practice could be, that the voter may not like any of the candidates, in this case he is forced to vote for a candidate he doesn't admire. The problem could be easily solved by adding a space for the voter to register the sentiment "No Candidate Acceptable."

Based on studies from countries with compulsory voting laws, their benefit cannot be doubted. Notwithstanding the widely prevalent conservative attitude that has discouraged any state from adopting mandatory voting laws, it is nevertheless time to try it. After all, states are entitled to experiment with laws that improve our democratic government. While compulsion of any kind is a restriction, so is the compulsion to drive only on the left side of the road. Sadly, it is by now clear that citizens participation in our democracy cannot be obtained voluntarily. That means mandatory laws are our only option.

> --Apurva Akash IV BE, EE

A customer in a shoe-shop heaved a sigh of relief: "At last, a pair that fits me."

"Not surprising," replied the weary salesman. "They're the ones you came in wearing, sir."

ADVERTISEMENTS: INFORMATIVE OR MISLEADING

(Awarded second in Articles on Social Issues)

Advertising is generally regarded as a form of communication the purpose of which is to convey concepts about companies, goods and services by means of words, pictures, diagrams, sound, music, color, shapes and symbols on two levels of significance- the national and the emotional. Running a business without advertising is just like winking at a beautiful girl in the dark, you know what you are doing but she does not know it.

Advertising can become an established essential of a country's economy. It contributes to boarding geographic system of distribution; to the volume sales, an essential corollary of mass production and to pricing of many produces within the economic means of average man. Advertising is any paid form of nonpersonal presentation and promotion of ideas, goods and services by an identified sponsor. Advertising can be defined as commercial messages to the public, designed to inform potential and established consumers and to encourage sales for the advertiser.

Advertising can stimulate demand and, where necessary can even create demand where none exists. Advertising arouses public interests, fosters a buying attitude and raises consumer demand for the products of the company. Advertising is the pivot of modern trade, commerce and business.

we dare to think

Advertising introduces existing and new company products to the public. Advertising enhances potential buyer's responses to the company and its offerings. Advertising tells that a product which the customer wants exists and from where it can be procured and at what price.

Advertisers may try to minimize information about or from consumers, groups, consumer controlled purchasing initiatives, or consumer controlled quality information system.

Another indirect effect of advertising is to modify the nature of communication media where it is shown. Media that get most of their revenues from publicity try to make their medium a good place for communicating ads before anything else. The clearest example is television where broadcasters try to make the public stay for a long time in a mental state that encourages spectators not to switch the channel during advertisements.

Advertisers use several different techniques for selling products. The most unethical technique is the hidden fear approach. This technique preys on people's fear to sell a product. It is most abused by the low involvement products. Deodorant, toothpaste, shampoo and other products that are easily substituted for their competitors are extremely guilty for this type of advertising. A deodorant commercial even went far enough to say if you did not use their product,

you would be banished by society and forced to live the remainder of your life as a hermit. These hidden approaches are considered to be unethical by most experts in the field. These techniques incite an irrational fears in people. The hidden fear approach still remains as one of the most successful advertising techniques used.

The Association Principle summarized by Campbell as the association of a product with some cultural value or image that has a positive connotation but may have a very little connection to the actual product. An example demonstrated by Campbell, the Gallo Wine Company advertised an entire line of wines featuring two older entrepreneurs as the owners of Bartley & Jaymes Company. This company was a total fabrication that the Gallo Company felt would relate to more of America's younger generation of wine drinker. A recognizable example of this is in one of the Miller Lite commercials. In this situation, a male is shown alone at his house watching a game. Once he opens a Miller Lite, the room fills with friends, beautiful girls and the best time that a popular guy would ever want to have. This commercial. in essence, states that if you are lonely(conflict), all that you need to become is the popular party guy in the case of Miller Lite(resolution) your prayers will be answered. This is totally untrue since a beer will not make you more popular and in extreme cases may turn you into an alcoholic.

Advertising is extremely important to the economy of the world. It drives the market and pays for most of the entertainment that so many of us enjoy. It is also the only way that we are furnished information about new and innovative products. We need to be more objective to the messages that are being fed to us. If we are not careful one could be lead by the media Gods down a path of destruction from which there is no return.Advertisers use many unhanded techniques to sell us their products and only the consumer can make a change.

--Shaifali Gupta

III BE, IT





An English teacher wrote these words on the whiteboard: "woman without her man is nothing". The teacher then asked the students to punctuate the words correctly.

The men wrote: "Woman, without her man, is nothing."

The women wrote: "Woman! Without her, man is nothing."

er er er

In a psychiatric hospital, a doctor was examining a patient.

"Why are you laughing so heartily?"

"I was telling myself funny stories and I'd just told one I'd never heard before."

nuances of economics and management

ERGONOMICS

Ergonomics is the scientific discipline concerned with the understanding of interactions among humans and other elements of a system and the profession that applies theory, principles, data and methods to design in order to optimize human well-being and overall system performance. The field is also called human engineering and human factors engineering.

Ergonomic research is primarily performed by ergonomists, who study human capabilities with respect to their work demands. Information derived from ergonomists contributes to the design and evaluation of tasks, jobs, products, environments and systems in order to make them compatible with the needs, abilities and limitations of people (IEA, 2000). In the UK the professional body for ergonomists is the Ergonomics Society.

Ergonomics draws on many disciplines in its study of humans and their environments, including anthropometry, biomechanics, mechanical engineering, industrial engineering, industrial design, kinesiology, physiology and psychology.

Typically, an ergonomist will have a BA or BS in Psychology, Industrial/Mechanical Engineering or Health Sciences, and usually an MA, MS or PhD in a related discipline. Many universities offer Master of Science degrees in Ergonomics, while some offer Master of Ergonomics or Master of Human Factors degrees.

More recently, occupational therapists have been moving into the field of ergonomics and the field has been heralded as one of the top ten emerging practice areas to watch for in the new millennium.

Five aspects of ergonomics

There are five aspects of ergonomics -- safety, comfort, ease of use, productivity/performance, and aesthetics. Based on these aspects of ergonomics, examples are given of how products or systems could benefit from redesign based on ergonomic principles.

- 1. Safety Medicine bottles: The print on them could be larger so that a sick person who may have impaired vision (due to sinuses, etc.) can more easily see the dosages and label. Ergonomics could design the print style, color and size for optimal viewing.
- 2. Comfort Alarm clock display: Some displays are harshly bright, drawing one's eye to the light when surroundings are dark. Ergonomic principles could redesign this based on contrast principles.
- Ease of use Street Signs: In a strange area, many times it is difficult to spot street signs. This could be addressed with the principles of visual detection in ergonomics.

- 4. Productivity/performance -HD TV: The sound on HD TV is much lower than regular TV. So when you switch from HD to regular, the volume increases dramatically. Ergonomics recognizes that this difference in decibel level creates a difference in loudness and hurts human ears and this could be solved by evening out the decibel levels. Voicemail instructions: It takes too long to have to listen to all of the obvious instructions. Ergonomics could address this by providing more options to the user, enabling them to easily and quickly skip the instructions.
- 5. Aesthetics Signs in the workplace: Signage should be made consistent throughout the workplace to not only be aesthetically pleasing, but also so that information is easily accessible for all signs.

Domains

The IEA divides ergonomics broadly into three domains:

Physical ergonomics: is concerned with human anatomical, anthropometric, physiological and biomechanical characteristics as they relate to physical activity. (Relevant topics include working postures, materials handling, repetitive movements, work related musculoskeletal disorders, workplace layout, safety and health.)

Cognitive ergonomics: is concerned with mental processes, such as perception, memory, reasoning, and motor response, as they affect interactions among humans and other elements of a system. (Relevant topics include mental workload, decision-making, skilled performance, human-computer interaction, human reliability, work stress and training — as these may relate to human-system design.)

Organizational ergonomics: is concerned with the optimization of sociotechnical systems, including their organizational structures, policies, and processes. (Relevant topics include communication, crew resource management, work design, design of working times, teamwork, participatory design, community ergonomics, cooperative work, new work paradigms, virtual organizations, telework, and quality management.)

History

The foundations of the science of ergonomics appear to have been laid within the context of the culture of Ancient Greece. A good deal of evidence indicates that Hellenic civilization in the 5th century BCE used ergonomic principles in the design of their tools, jobs, and workplaces. One outstanding example of this can be found in the description Hippocrates gave of how a surgeon's workplace should be designed (see Marmaras, Poulakakis and Papakostopoulos, 1999).

The term ergonomics is derived from the Greek words ergon [work] and nomos [natural laws] and first entered the modern lexicon when Wojciech Jastrzêbowski used the word in his 1857 article Rys ergonomji czyli nauki o pracy, opartej na prawdach poczerpniêtych z Nauki Przyrody.

Later in the 19th century Frederick Winslow Taylor pioneered the "Scientific Management" method, which proposed a way to find the optimum method for carrying out a given task. Taylor found that he could, for example, triple the amount of coal that workers were shovelling by incrementally reducing the size and weight of coal shovels until the fastest shoveling rate was reached. Frank and Lillian Gilbreth expanded Taylor's methods in the early 1900s to develop "Time and Motion Studies." They aimed to improve efficiency by eliminating unnecessary steps and actions. By applying this approach, the Gilbreths reduced the number of motions in bricklaying from 18 to 4.5, allowing bricklayers to increase their productivity from 120 to 350 bricks per hour.

World War II marked the development of new and complex machines and weaponry, and these made new demands on operators' cognition. The decision-making, attention, situational awareness and hand-eye coordination of the machine's operator became key in the success or failure of a task. It was observed that fully functional aircraft, flown by the best-trained pilots, still crashed. In 1943, Alphonse Chapanis, a lieutenant in the U.S. Army, showed that this so-called "pilot error" could be greatly

reduced when more logical and differentiable controls replaced confusing designs in airplane cockpits.

In the decades since the war. ergonomics has continued to flourish and diversify. The Space Age created new human factor issues such as weightlessness and extreme g-forces. How far could environment in the space be tolerated, and what effects would they have on the mind and body? The dawn of the Information Age has resulted in the new ergonomics field of human-computer interaction (HCI). Likewise, the growing demand for and competition among consumer goods and electronics has resulted in more companies including human factors in product design.

At home, work, or play new problems and questions must be resolved constantly. People come in all different shapes and sizes, and with different capabilities and limitations in strength, speed, judgment, and skills. All of these factors need to be considered in the design function. To solve design problems, physiology and psychology must be included with an engineering approach.

Applications

More than twenty technical subgroups within the Human Factors and Ergonomics Society (HFES) indicate the range of applications for ergonomics. Human factors engineering continues to be successfully applied in the fields of

aerospace, aging, health care, IT, product design, transportation, training, nuclear and virtual environments, among others. Kim Vicente, a University of Toronto Professor of Ergonomics, argues that the nuclear disaster in Chernobyl is attributable to plant designers not paying enough attention to human factors. "The operators were trained but the complexity of the reactor and the control panels nevertheless outstripped their ability to grasp what they were seeing [during the prelude to the disaster]."

Physical ergonomics is important in the medical field, particularly to those diagnosed with physiological ailments or disorders such as arthritis (both chronic and temporary) or carpal tunnel syndrome. Pressure that is insignificant or imperceptible to those unaffected by these disorders may be very painful, or render a device unusable, for those who are. Many ergonomically designed products are also used or recommended to treat or prevent such disorders, and to treat pressurerelated chronic pain.

Human factor issues arise in simple systems and consumer products as well. Some examples include cellular telephones and other handheld devices that continue to shrink yet grow more complex (a phenomenon referred to as "creeping featurism"), millions of VCRs blinking "12:00" across the world because very few people can figure out how to program them, or alarm clocks that allow sleepy users

to inadvertently turn off the alarm when they mean to hit 'snooze'. A user-centered design (UCD), also known as a systems approach or the usability engineering lifecycle aims to improve the user-system.

Ergonomics in the workplace

Outside of the discipline itself, the term 'ergonomics' is generally used to refer to physical ergonomics as it relates to the workplace (as in, for example, ergonomic chairs and keyboards). Ergonomics in the workplace has to do largely with the safety of employees, both long and short-term. Ergonomics can help reduce costs by making improving safety. This would decrease the money paid out in workers' compensation. For example, over five million workers sustain overextension injuries per year. Through ergonomics, workplaces can be designed so that workers do not have to overextend themselves and the manufacturing industry could save billions in workers' compensation.

Workplaces may either take the reactive or proactive approach when applying ergonomics practices. Reactive ergonomics is when something needs to be fixed, and corrective action is taken. Proactive ergonomics is the process of seeking areas that could be improved and fixing the issues before they become a large problem. Problems may be fixed through equipment design or task design. Equipment design changes the actual, physical devices used by people. Task design changes what people do with the equipment.

Seating Ergonomics

The best way to reduce pressure in the back is to be in a standing position. However, there are times when you need to sit. When sitting, the main part of the body weight is transferred to the seat. Some weight is also transferred to the floor, back rest, and armrests. Here the weight transferred is the key to a good seat design. When the proper areas are not supported, sitting in a seat all day can put unwanted pressure on the back causing pain.

The lumbar (bottom five vertebrate in the spine) needs to be supported to decrease disc pressure. Providing both a seat back that inclines backwards and has a lumbar support is critical to prevent excessive low back pressures. The combination which minimizes pressure on the lower back is having a backrest inclination of 120 degrees and a lumbar support of 5 cm. The 120 degrees inclination means the angle between the seat and the backrest should be 120 degrees. The lumbar support of 5 cm means the chair backrest supports the lumbar by sticking out 5 cm in the lower back area.

Another key to reducing lumbar disc pressure is the use of armrests. They help by putting the force of your body not entirely on the seat and back rest, but putting some of this pressure on the armrests. Armrest needs to be adjustable in height to assure shoulders are not overstressed.

> -- Konika Gupta I MBA

CELEBRITY ENDORSEMENT

INTRODUCTION

There are around 130 television channels in India broadcasting over 3 million television commercials each year in India. The media-explosion can thus be easily demonstrated. Moreover, people forget 80% of the information in just 24 hours! Just imagine the plight of the marketer to make his brand shout over the deafening clutter of all the brands! So in the 80's, Indian marketers found the solution, 'Celebrity Endorsement' for the brand

Today 'Celebrity Endorsement' has immense debate on, whether it really contributes to the brand building process or it is just another lazy tool to make the brand more visible in the minds of the consumers. Although it has been observed that the presence of a well-known personality helps in solving the problem of over-communication.

WHY COMPANIES USE CELEBRITIES IN THEIR ADVERTISING?

Attracts Attention: Celebrities ensure attention of the target group by breaking the clutter of advertisements and making the ad and the brand more noticeable.

Associative Benefit: A celebrity's preference for a brand gives out a persuasive message as the celebrity is getting benefit from the brand, the consumer will also benefit...

Psychographic Connect:: Stars are loved and adored by their fans and advertisers use stars to capitalize on these feelings to sway the fans towards their brand.

Mass Appeal: Some stars have a universal appeal and therefore prove to be a good bet to generate interest among the masses and hence the sales get increased.

Increased Consumerism: Film stars and cricketers are considered national icons, they act as ideal candidates for mass. Basically, celebrity endorsements give a brand a touch of glamour, and the hope that a famous face will provide added appeal and name recognition in a crowded market. A known face excites a customer and an effective demand is created.

Credibility Aid: Using a celebrity is supposed to lend instant credibility as well as aspiration values to the brand as the use of sports personality in footwear advertising.

Ready Recall: A familiar face tends to easy recall of an ad. Nakshatra advertising is remembered only due to the sensuous Aishwarya Rai. In fact the target audience with age group of 15-30 gets influenced first by cricketers, then Bollywood stars and only then by music, food and festival.

BENEFITS OF CELEBRITY ADVERTISING (THE FOUR Qs)

Quick Saliency: Goodlass Nerolac has ensured high saliency for its brand with the inclusion of Amitabh Bachchan in its advertising.

Quick Connect: There needs to be no insight but the communication connects because the star connects. Sachin, Shah Rukh and their ilk's ensure an easy connect for Pepsi with the youth.

Quick Shorthand for brand values: The right star can actually telegraph a brand message fast without elaborate story telling. Kapil Dev and Sachin Tendulkar seem to have done that successfully for Boost in the early '90s. And helped to differentiate it in the malted beverages market.

Quick means of brand differentiation: In a category where no brand is using a celebrity, the first that picks one up, could use it to differentiate itself in the market. Boost did it in the malted beverage category.

Preity Zinta does all the above four for Perk -- connecting with the youth and reinforcing the brand's youthful, spontaneous, energetic values.

Celebrities are often used in ads to endorse the product because celebrities are more efficient at mass appeal and reach large audience at a low cost per person and the ads featuring celebrities are more efficient at competing when in competition with mere product descriptive ads.

It is high time when advertisers should look at the quality side. Having celebrity may be enough for an ad to become popular, but there should be more emphasis on the product than on the model featuring in it. The problem is that the huge ad cost is included in the cost of the product, which consumer has to bear.

--Latika Dhuria I MBA



अंतःकरण का प्रतिबिम्ब

में देख रहा हूँ

(त्तीय पुरस्कृत कविता) जिंदगी हर सुबह नये भाव दिखाती है, इक पहर हँसाती, सात पहर रूलाती है। फिर भी जिंदगी जीने की ये कसक, सबको पल-पल कर्मपथ पर चलाती है। यह मैं देख रहा हूँ। जिस घर में रात को खुशियों ने डेरा डाल रखा था, नई सुबह की पहली किरण के साथ, वहाँ मातम यह मैं देख रहा हूँ। जिस पल को वे हँस-हँस कर जी रहे थे, वही पल उनको भारी लगता यह मैं देख रहा हूँ। वे सपने आँखों में संजोये, जी रहे थे, पूरा होने की उम्मीद जिनकी कर रहे थे, अगले ही पल, उन सपनों के राख का ढेर, मैं देख रहा हूँ। कुछ में जिदंगी को कोसने की ईर्ष्या, कुछ में जिदंगी को समझने की ललक, मैं देख रहा हूँ। कुछ को हँसते, कुछ को रोते, और किसी को तड़पते-तरसते किसी की जिंदगी सँवरते, और किसी की जिदंगी तमाशा बनते, मैं देख रहा हूँ। और सोच रहा हूँ, ऊपर वाला खेलता कोई खेल हमारे साथ है, या. वो हमें परखने की कोशिश कर रहा है, क्यों इतनी तड़प दुःख परेशानियों के बावजूद, लोगों में जिदंगी जीने की ललक छूटती नहीं? इसलिए, लोगों को कर्मपथ पर चलते मैं देख रहा हूँ। जिदंगी जीने का, हर पल समझने का नाम है। यह मैं समझ रहा हूँ। मैं देख रहा हूँ।

> —महेन्द्रपाल सिंह यादव प्रथम बी.टैक, इलैक्ट्रौनिकी एवं संचार

> > भाव - गंगा

(प्रथम पुरस्कृत कविता)

भावगंगा की अविरल धार बहा ले जाती है परिस्थितियों के पार। दर्द के थपेड़े चीर देते हैं संयम की पाल, भावावेश के ढेरों में टिकती नहीं बुद्धि की पतवार,
छूट जाता है नैया पर अधिकार।
भाव गंगा की अविरल धार
जब फँस जाता हूँ भँवर में मैं इस गंगा की,
रोम—रोम कर उठता है हाहाकार —
हिर हे हिर करो उद्धार।
लील न जाए गंगा ये मेरा संसार।
भाव गंगा की अविरल धार
कहा हिर ने अतंमन से मेरे
मथा समुद्र को हमने, रत्नों का लगा अंबार
तू भी मथ इस गंगा को,
कर ले दूर अपने विकार।
भाव गंगा की यह अविरल धार
ले जाएगी तुझे भवसागर पार।

-ऋतु रंजन कुमार

बी. टैक. प्रथम, संगणक अभियांत्रिकी

आने दो बेटियों को धरती पर
आने दो बेटियों को धरती पर,
मत बजाना थाली चाहे।
वरना कौन बजाएगा
थालियाँ कांसे की
अपने भाई-भतीजों के जन्म पर।
आने दो बेटियों को धरती पर।।
मत गाना मंगल गीत चाहे,
वरना कौन गायेगा गीत
अपने वीरों की शादी में।
आने दो
पनपने दो भ्रूण उनके
वरना कौन धारण करेगा
तुम्हारे बेटों के भ्रूण अपनी कोख में,
आने दो बेटियों को धरती पर।।

-पुष्पेन्द्र चौधरी प्रथम बी.टैक. **-दिनेश शेखावत** प्रथम बी.टैक.

अपने

दुनिया की विचित्रता को देख आज हर कोई वक्त का पासा है। इस घने कोहरे को चीर दे जो, प्रकाश बिम्ब ही एक आशा है।। इस भाग दौड़ में न जाने कैसी, बस आगे बढ़ने की ही होड़ है। छूट गया अपनों का ही हाथ, ये कैसा अजब सा मोड़ है।। माना था अब तक जिन्हें अपना, उन्हीं के साथ को तरसते हैं। हौंसलों की उड़ान भरते थे जो, अब माटी के घरौंदों में बसते हैं।। जब भूल गये वो हमें ही जिनकी हर बात को हम सहते थे। जो छोड़ गये हमें यू तन्हा क्या इन्हें ही हम अपने कहते थे?

> **-पुष्पेन्द्र चौधरी** बी.टेक, प्रथम वर्ष

छोड़ो कोला पेप्सी पीओ शरबत लस्सी

ये विदेश से आई है इसका नाम है कोला पेप्सी, इसकी पी एच दो पोइंट सात जिससे खराब होते हैं दाँत।

इसका मूल्य पानी से ज्यादा पर गुण इसमें कुछ नहीं, प्यास बुझाता पानी बेचारा, इससे होता पेट खराब हमारा।

यह कई बीमारियाँ फैलाती है जो एसिडिटी, बदहजमी कहलाती है। यह हमें खूब सताती है फिर भी खूब मौज मनाती है।

अब मेरी मानो, छोड़ो कोला पेप्सी, अपनाओ देसी छाछ और लस्सी, यहाँ तो है एक कहावत ऐसी असी, तुसी और लस्सी।

दोनों हैं कितने गुणकारी, हम सबको है लस्सी प्यारी, तन मन को देते हैं ठण्डक, इनसे रहता एक्टिव मस्तक।

गर्मी में शरबत का कमाल इसका है अनोखा जादुई जाल इसमें गिरकर देखा जिसने हो गया मनवा मालामाल।

समझ में कुछ आया क्या बंधू, छोड़ पेप्सी कोला का गंदा मायाजाल, पी ठण्डी शरबत और लस्सी, जिससे करे तेरा मनवा ताल।

> **–मुकेश कुमार खाण्डल** प्रथम बी.टैक, संगणक अभियांत्रिकी

कल्पना एवं कला का समन्वय

अशोक के पेड़ (प्रथम पुरस्कृत कहानी)

आज का दिन मेरे लिये अच्छा गुजरने वाला नहीं था। यह बात मैं मौसम का मिजाज देखकर या किसी पंडित की भविष्यवाणी के आधार पर नहीं कह रहा हूँ। मुझे 10-12 दिनों के लिये शिमला भेजा जा रहा था। मुझे अपने उस खुशहाल घर से प्रस्थान करना था जहाँ निवास करते थे मेरे बेटे—बहू पोते—पोती और अशोक के पेड़

मेरा मन हल्का करने के लिये बहू मीरा ने मेरे पंसद की खीर बनायी। अपना सामान ले कर अशोक के पेड़ों के बारे में सोचता हुआ मैं कब नीचे आ गया, पता ही नहीं चला। फिर दुःखी मन से खाने की टेबल पर बैठ गया, तभी अचानक "क्या बात है पिताजी?" आपके पंसद की खीर बनायी है और आपने तो अभी तक हाथ भी नहीं लगाया — मीरा ने सम्मानजनक तरीके से मेरी ओर देखकर कहा। "कोई बात नहीं है, बस अभी खाता हूँ।" अनमने मन से खा लिया।

पिछले कुछ दिनों से एक बैचेनी मन में हलचल मचा रही थी। घर में गेस्ट रूम की आवश्यकता महसूस होने लगी थी और इसके लिये एक माकूल जगह का इतंजाम करना था। एक ऐसा हॉल, जहाँ घर आया अतिथि निर्विघ्न सभी सुविधाओं का उपभोग कर सके। बेटे—बहू ने सोच समझकर और जानकारों से राय लेकर पच्चीस बाय पच्चीस फीट का एक हॉल बनवाने का तय किया।

बस, अड़चन यह थी कि उन अशोक के पाँच पेड़ों को शहीद होना पड़ेगा जो कि फैलकर कुछ यूँ खड़े थे कि बरबस किसी की भी नजर उन पर चली जाती। बेटे ने पन्द्रह एक दिन पहले ही बताया था कि "पापा गेस्ट रूम बनने में ये पेड़ रूकावट डाल रहे हैं। इन्हें काटना ही पड़ेगा।" फिर मीरा की ओर देखकर हँसते हुए बोला – पता है, मम्मी इन पेड़ों से कितना चिढ़ती थीं। मम्मी पापा से कहती थीं, कुछ त्यौहारों की जरूरत के लिये कब तक इन पेड़ों को छाती से लगाये रखोगे।

"बेटे ये सब तो बहुत पहले की बात है। बाद में तो तुम्हारी माँ ने भी इनकी जी जान से सेवा की है और मेरे लिये तो ये पेड़ अमृत समान है, मेरे नये जीवन का सूत्रपात।" मन में ही बुदबुदाकर कहा। जब तक पत्नी लक्ष्मी रही, हमेशा मुझे सताती रही। शायद हम दोनों की नोंक—झोंक ही हमें एक—दूसरे से जोड़े रखती थी जिसके साक्षी थे ये पेड़। अशोक के पेड़ तो एक सेतु थे, हम दोनों की बातचीत के केन्द्र।

एक जैसे पाँच गमलों में अशोक के पौधों को लगभग चार वर्ष तक तमाम कोशिशों के साथ पल्लवित होने दिया। गांव से शहर में तबादला होने पर पत्नी लक्ष्मी और मेरी उमंगे भी पल्लवित हो उठीं। लक्ष्मी भी पेडों के प्रति मेरे प्यार का आदर करने लगी। जिन दिनों घर के शेष सदस्य स्वयं को और घर को शहरी तौर तरीकों में ढालने में व्यस्त थे उन दिनों मेरी और धर्मपत्नी जी की प्रमुख चिंता यही थी कि उन पौधों को गमलों से जमीन के किस हिस्से में उतारा जाये ताकि उन्हें सूर्य का वांछित उजाला व ताप मिले। हमारे संयुक्त प्रयासों से वे पाँचों माकूल स्थानों पर पास-पास लग गये। वे पाँचों पेड ऐसे पल्लवित हुये कि आते जाते लोग पलभर के लिये रूक जाते और उन्हें कुंती के पाँच पांडवों की संज्ञा देते। धीरे-धीरे ये हालात हो गये कि त्यौहारों पर अलसुबह से ही छोटे-छोटे बच्चों से लेकर बड़े-बुजुर्ग तक "अशोक के पत्ते पूजा के लिये चाहिये" कहते हुये आ जाते। मैं ही पत्ते तोड़कर देता और मुझे भी आनन्द आने लगा। हम यही बातें करते – "इन पाँचों ने किस तरह पूरे मोहल्ले को हम से जोड़ दिया। जो भी इसकी पत्तियाँ लेने आता, दु:ख—सुख की दो—चार बातें कर ही लेता है।" जो भी घर में आता यही कहता — "आपके पेड़ों की बात ही कुछ अलग है।" शायद, इन पेड़ों को लक्ष्मी के स्नेह की अतिरिक्त खाद मिली थी।

और आज जब से इन पेड़ों को काटने की बात हो रही है, तब से मुझे अहसास हुआ कि लक्ष्मी अब वास्तवित रूप में मुझसे बहुत दूर चली जायेगी। मानो लक्ष्मी की आत्मा का वास उन पेड़ों में था। यही कारण था कि मुझे बैचेनी महसूस होने लगी और डाक्टर्स ने तबयीत खराब होने का कारण बताकर अस्पताल में भर्ती कर लिया। परन्त्र जब छोटी-छोटी 20 एम.जी. की गोलियां और 5 एम.एल. दवाई की बूंदें भी असरकारक नहीं रही तो, डाक्टर्स ने मेरी हवा पानी बदलने की सलाह बेटे-बहू को दे डाली। ये डाक्टर क्या जाने कि यह उनकी बसायी हुई प्रकृति से बिछड़ने का दर्द है जो हवा-पानी बदलने, हसीन वादियों और ऊँची पहाड की चोटियों पर विचरने से दूर नहीं होगा।

अब, जब रवानगी का वक्त आया, तब भी मेरा मन पेड़ों में ही अटका रहा। बहू के जोर देने पर बेमन से नाश्ता कर मैं बाहर आ गया। काफी देर तक अशोक के पेड़ों के पास बना रहा। उनके द्वारा लक्ष्मी के पास होने का एहसास प्राप्त होता रहा। तभी अचानक पीछे आहट हुयी देखा तो बेटा खड़ा था। उसने मुझसे कुछ ऐसा कहा जो मुझे अनायास और सुखद लगा। मैं एक अचंभित प्रसन्नता में डूबा कुछ देर यूं ही स्तंभित रह गया।

उसने कहा — "पिताजी, हमने फैसला किया है कि हम लोग इन अशोक के पेड़ों को नहीं कटवायेंगे, हमारा गेस्ट रूम घर के पिछले दरवाजे के करीब होगा। हम नहीं चाहते कि इन पेड़ों के टूटने के साथ—साथ हमारे पिताजी भी अन्दर से टूट जायें।" क्रमामा एवं कला का समस्वय

इन वाक्यों को सुनकर मेरा मन खुशी से फूला नहीं समा रहा था। मुझे गर्व था कि मेरे द्वारा दी गई शिक्षा और संस्कार वर्ध नहीं गये हैं। मैं बहुत खुश था, इतना कि किसी तरह खुशी से धड़कते दिल को काबू में रखकर बोल पाया — "एक दिन मेरी पत्नी ने मेरी भावना को सही स्वीकारा था और आज मेरे बेटे ने मेरी भावना को समझा है।"

-प्रकाश अग्रवाल

प्रथम बी.टैक., कम्प्यूटर अभियांत्रिकी

मधुमती

जेठ की तपती दोपहरी में सूरज आग उगल रहा था लेकिन अपनी प्रजा के सौभाग्य और इन्द्र देव को प्रसन्न करने के लिए राजा अग्रसेन हल चला रहे थे। यह एक रिवाज था जब कभी राज्य में अकाल पड़ जाता तो इन्द्र देव को प्रसन्न करने के लिए राजा किसान बनकर किसी खेत पर स्वयं हल चलाते। उसी खेत पर महायज्ञ होता और वह खेत हमेशा के लिए राजा का हो जाता व उस किसान को खेत का पूरा मूल्य दे दिया जाता।

अकाल से जूझ रही जनता की खुशहाली के लिए राजा मधुमती के खेत पर हल चला रहे थे और उनके पीछे मधुमती बीज बो रही थी। हल्के नीले रंग के कपड़ों में लम्बे लहराते बालों वाली मधुमती की सुंदरता मानो गर्मी में ठण्डी हवा का झोंका।

शुक्ल पक्ष की पूर्णिमा को होने वाले इस कार्यक्रम में कई राज्यों के राजा और राजकुमार भाग लेने आते थे। उन्हीं में से एक थे राजकुमार आर्यन। आर्यन वैसे तो शत्रु देश के राजकुमार थे लेकिन इस कार्यक्रम के बारे में सुन कर वह एक साधारण नागरिक के वेष में आए थे। आर्यन मधुमती को देखते ही उसकी सुंदरता पर मुग्ध हो गए और उसे अपना दिल दे बैठे। कार्यक्रम के अंत में मधुमती ने खेत का मूल्य लेने से इंकार कर दिया। जब राजा को ये बात पता चली तो उन्होंने मंत्री से मधुमती के बारे में पूछा। मंत्री ने बताया, "मधुमती के पिता एक सैनिक थे जो अपने राज्य के लिए युद्ध करते हुए वीरगति को प्राप्त हुए"। मधुमती के व्यक्तित्व और सुंदरता की चर्चा हर जगह थी। वो भी अपने पिता की तरह स्वाभिमानी, देशभक्त और आत्मसम्मान रखने वाली एक बहादुर लड़की थी।

जब राजा ने मधुमती से खेत का मूल्य न लेने का कारण पूछा तो उसने कहा जब मेरे पिता अपने राज्य के लिए अपनी जान दे सकते है तो क्या मैं अपने राज्य की जमीन के टुकड़े का मूल्य मागूंगी? मधुमती की बात सुनकर राजा अग्रसेन की छाती गर्व से फूल गई। राजा ने मधुमती को कभी भी कुछ भी मांगने का वचन दिया।

कार्यक्रम के आखिरी दिन राजकुमार आर्यन रात को मधुमती की झोंपडी पर अपने प्यार का इजहार करने और उसे अपने साथ अपने राज्य ले जाने आए। आम्र वृक्ष के नीचे सो रही मधुमती के बाल ठण्डी हवा के झोंके से उसके सुंदर चेहरे को ढके थे। अपने घोड़े से उतर कर मधुमती के लवणीय रूप को देखकर राजकुमार एक पल वही ठहर गए और काफी देर तक मधुमती को निहारते रहे। फिर उनके कदम खुद ब खुद मधुमती की ओर बढ़ने लगे जैसे ही वो मधूमती के पास पहुंचे उसकी आंख खुल गई। मधुमती को एकटक निहारते हुए आर्यन ने अपना परिचय दिया, "मैं समरगढ़ का राजकुमार आर्यन हूँ। जानता हूं शत्रु हूँ, लेकिन मैं तुमसे बहुत प्यार करता हूँ और तुमसे शादी करके अपने राज्य ले जाना चाहता हूँ।" राजकुमार ने बहुत सीधे और भोलेपन से अपने दिल की बात मधुमती को बता दी।

उसका यह भोलापन मधुमती को पसंद आया लेकिन समरगढ़ का नाम सुनते ही उसकी आंखे गुस्से से लाल हो गईं। समरगढ़ वही राज्य था जिसके विरूद्ध युद्ध करते उसके पिता शहीद हो गए थे। वो यह बात बर्दाश्त न कर सकी और चीखते हुए बोली "तुम्हारी हिम्मत कैसे हुई यहां कदम रखने की। तुम्हारे राज्य ने मुझसे मेरे पिता को छीन लिया और तुम मुझसे शादी करना चाहते हो? यह कभी नहीं हो सकता।

आर्यन ने उसे समझाने की कोशिश की

— वो एक युद्ध था और युद्ध में ऐसा हो
जाता है। हमारे राज्य के बहुत सारे सैनिक
वीरगति को प्राप्त हुए लेकिन मैं यह
दुश्मनी खत्म करना चाहता हूँ। मेरा यकीन
करो। लेकिन मधुमती कुछ भी सुनने को
तैयार न थी। आखिर राजकुमार ने
जाते—जाते कहा मैं तुमसे सच्चा प्यार
करता हूँ और करता रहूंगा। तुम्हें कभी भी
मेरी आवश्यकता हो तो मुझे याद करना,
आ जाऊंगा।

आंखों में आंसू लिए राजकुमार वहां से चले तो गए लेकिन मधुमती के दिल में अपने प्यार का बीज बो दिया।

3 साल बाद

मधुमती दूसरों के खेतों पर मजदूरी कर अपना गुजारा चलाती थी और अब उसका शरीर बहुत दुबला पतला हो गया था।

उस रात बहुत तेज बारिश हो रही थी।
मधुमती अपनी झोंपड़ी में अकेली बैठी
राजकुमार आर्यन के बारे में सोच रही थी,
तभी किसी ने आवाज दी—कोई है? मधुमती
ने बाहर देखा तो उसे अपनी आंखों और
किस्मत पर यकीन नहीं हो रहा था। सामने
राजकुमार आर्यन खड़े थे। आर्यन को भी
यकीन नहीं हो रहा था वो जिसके सामने
खड़ा है वो मधुमती है और वो भी आंखों में
उसके लिए प्यार और इंतजार लिए।

मधुमती आर्यन को झोंपड़ी में लाई और उससे यहां आने का कारण पूछा। पहले तो आर्यन ने टालने की कोशिश की लेकिन फिर मधुमती के जोर देने पर उसने कल्पमा एवं कला का समन्वय

कहा — पिताजी ने मेरे सौतले बड़े भाई का राजतिलक कर दिया और बड़े भाई ने मुझे ईर्ष्यावश राज्य से बाहर निकाल दिया। मैं अपने तिरस्कार का बदला लेने अपने 50 विश्वास पात्र सैनिकों के साथ विजयी अभियान पर निकला हूँ। अब बाजी आर या पार होगी। तुम बताओ तुम कैसी हो?"

मधुमती ने रोते रोते आर्यन से अपने किए की माफी मांगते हुए कहा—मैं उस दिन गुस्से में तुम्हारे प्यार को समझ नहीं सकी। मुझे माफ कर दो मैंने तुम्हारा दिल दुखाया। आर्यन ने आगे कहना जारी रखा — मैं अपने विजयी अभियान की शुरूआत इसी राज्य से करना चाहता हूँ और मुझे तुम्हारी मदद चाहिए। मैं जानता हूँ तुम्हें ये सुनकर दुख होगा लेकिन अपने आर्यन पर यकीन रखो अगर तुम मेरे साथ हो तो मैं कभी नहीं हारूंगा। तुम्हें रानी बनाकर रखूंगा।

मधुमती ने आखिरकार आर्यन की बात मान ली। अगले दिन वो आर्यन के कहे अनुसार राजा अग्रसेन से वह जमीन मांगने गई जो सैनिक किले के पास थी और खाली पड़ी थी। राजा को सुनकर आश्चर्य हुआ कि उस जमीन को मांगने का विशेष कारण क्या है। मधुमती का तर्क भी हाजिर था क्योंकि वहां पास से नदी बहती है सो सिंचाई की सुविधा है।

एक वीरगति प्राप्त देशभक्त की बेटी होने के कारण, उसके वाक् चातुर्य से प्रसन्न होकर और अपने वादे को ध्यान में रख कर राजा ने मधुमती को उसी जमीन पर खेती करने की अनुमति दे दी।

आर्यन के विश्वासपात्र सैनिकों ने मधुमती की नई जमीन पर बनी झोंपड़ी से किले के अंदर जाने के लिए सुरंग बनानी शुरू कर दी थी।

आखिरकार हमले वाले दिन आर्यन ने मधुमती को पुरानी झोंपड़ी पर जा कर उसका इंतजार करने को कहा। मध्यरात्रि हो चुकी थी लेकिन मधुमती धीरे—धीरे अपनी झोंपड़ी की तरफ जा रही थी।
मधुमती जंगल के चप्पे—चप्पे से वाकिफ
थी। आज अचानक न जाने उसे क्या हो
गया था। वो नहीं जानती थी कि वो क्या
करने जा रही थी। मधुमती जंगल के हर
एक रास्ते को जानती थी लेकिन आज वो
नहीं जानती थी कि जिस रास्ते वो जा रही
हैं वो सही है या गलत? वो नहीं जानती
ये रास्ता कहां जा रहा हैं?

उसके अंदर का देशभक्त जाग रहा था। जिस राज्य को बचाने के लिए उसके पिता ने अपनी जान दे दी आज वो खुद उसी राज्य को उन्हीं दुश्मनों के हाथों में सोंप रही है? वो ऐसा कैसे कर सकती है? यानि उसके पिता का बलिदान व्यर्थ चला जाएगा?

एक तरफ उसका प्यार, उसकी जिंदगी, उसके सपने थे तो दूसरी तरफ उसकी देशभक्ति और उसके पिता का बलिदान उसे समझ नहीं आ रहा था कि वो क्या करे?

इसी कशमकश में उसे सामने से आते सेनापित भी दिखाई नहीं दिए और उसने उनके पूछे सवालों का जवाब भी नहीं दिया। वो अपनी ही कशमकश में चली जा रही थी?

आखिर में उसकी देशभिक्त ने उसके प्यार को हरा दिया। वह जितना हो सके उतना तेज भागी और राजमहल पहुंच कर राजा को राजकुमार आर्यन की सही योजना बता दी।

राजकुमार आर्यन को गिरफ्तार करके फांसी की सजा सुना दी गई और उसके 50 साथियों को मार दिया गया।

जिस दिन राजकुमार को फांसी दी जानी थी सारी प्रजा उसे देखने आई थी। लेकिन मधुमती कहीं दिखाई नहीं दे रही थी। जैसे ही राजकुमार को फांसी दी जाने वाली थी भीड़ को चीरती मधुमती राजा अग्रसेन के चरणों में गिरकर आर्यन की जिंदगी की भीख मांगने लगी। उसकी देशभक्ति और आर्यन के लिए उसके प्यार को देखते हुए राजा ने आर्यन को माफ तो कर दिया लेकिन साथ ही दोनों को देश निकाला दे दिया गया।

आर्यन और मधुमती अब एक नए रास्ते पर निकल चले थे। अपने—अपने प्यार की अग्निपरीक्षा देकर, जो शायद अब उन्हें सही मंजिल की तरफ ले जा रहा था।

-संतोष चौधरी

प्रथम बी.टैक

माँ

(द्वितीय पुरस्कृत कविता) तेरी कोख में पैदा होकर माँ, मैंने इस जग को देखा। मेरे रोने की आवाज सुनकर, माँ मैंने तुझे व्याकुल देखा। पहला शब्द निकला मुख से, माँ तेरा ही नाम निकला। पहला कदम उठा गिरा तो, माँ तेरा ही मुझे साथ मिला। बुरी नजर से बचा रहा मैं. माँ तेरे आँचल का छाँव मिला। शिक्षा का जब ज्ञान लिया. माँ हर पल तेरा साथ मिला। पढ़-लिख कर बड़ा हुआ जब, माँ तेरी नजरों में नाज देखा। तेरी कोख से पैदा होकर माँ, मैंने इस जग को देखा। जब घर से निकला कमाने. माँ तेरा आत्मज्ञान मिला। कमाकर लाया घर में तो, माँ तेरा आशीर्वाद मिला। लिया आज तक सब तुझसे माँ, या तुझे उसका प्रतिकार मिला। मैं भूल गया सब उपकार तेरे, माँ फिर भी मुझे तेरा सत्कार मिला। तेरी कोख से पैदा होकर माँ,

> मैंने इस जग को देखा।। -पुष्पेन्द्र चौधरी पथम बी.टैक.



बहुरूपी रंगों का समायोजन

पुण्यभूमि भारत

रत्नाकराधौतपदां हिमालय किरीटिनीम्।
ब्रह्मराजिर्ष्क्तरत्नाद्यां वन्दे भारतमातरम्।
सागर जिसके चरण धो रहा है,
हिमालय जिसका मुकुट है और जो ब्रह्मिष्क्रिं
तथा विद्वान रूपी रत्नों से समृद्ध है, ऐसी
भारतमाता की मैं वन्दना करता हूँ।

भारतभूमि-हमारी देवभूमि, पुण्यभूमि, मातृभूमि। इसके कण कण में हमें पवित्रता के दर्शन करने चाहिए। हमें इस बात पर गर्व होना चाहिए कि हमारा जन्म भारत में हुआ है। ऐसा कहा भी गया है कि —

दुर्लमं भारते वर्षे जन्मतस्मानमनुष्यता।
मानुषे दुर्लमं चापि स्व स्व धर्मे प्रवर्तिता।
अर्थात् भारत में जन्म लेना कठिन है,
उससे भी कठिन है मानव रूप पाना और
उससे भी कठिन है अपने अपने कर्तव्य में

प्रवृत्त होना।

योगीराज महर्षि अरविन्द ने कहा था —

यदि किसी राष्ट्र के प्रत्येक व्यक्ति के मन

में तीन निम्न बातें हो तो उस राष्ट्र को

महान बनने से कोई नहीं रोक सकता —

- 1. अतीत के प्रति गौरव का भाव।
- 2. वर्तमान की पीडा।
- 3. भविष्य के सपने।

वर्तमान में यह तीनों बात हमारे देश के युवावर्ग के मानस पटल से गौण होती नजर आ रही हैं। आज युवावर्ग में अपने अतीत के प्रति गौरव का भाव नहीं मिलता। हम सबने अपने मन में ऐसा भ्रम फैला रखा है कि भारत में तो केवल अंधेरा ही था। ऐसा माना जाता है कि ज्ञान का विकास यूरोप से शुरू हुआ। यह भ्रम इसलिए है कि यूरोपियन शिक्षा पद्धति और मैकाले ने पाठ्यपुस्तकों में भारत के ज्ञान एवं चिन्तन को कोई स्थान नहीं दिया। बाद की पुस्तकों में भी यही लिखा गया कि विकास की यात्रा यूरोप से ही शुरू हुई। यह सत्य नहीं है।

वास्तविकता यह है कि भारत का इतिहास प्रबल वैभवशाली रहा है। भारत प्रत्येक क्षेत्र में उन्नति के शिखर पर विराजमान था। भारत ज्ञान, अर्थ, शक्ति, जनशक्ति, भूमि, आध्यात्म एवं संस्कृति के वैभव से परिपूर्ण था। इसी कारण से विश्वगुरू, सोने की चिड़िया इसके पर्याय थे। भारतीय संस्कृति में ही 'वसुधैव कुटुम्बकं' एवं 'सर्वेः भवन्तु सुखिनः' की कामना मिलती है। हमें इतिहास में ऐसे बहुत उदाहरण मिलते हैं। जैसे भास्कराचार्य ने न्यूटन से 500 वर्ष पूर्व ही गुरुत्वाकर्षण एवं ग्रहों की गति की खोज की। विद्युत सैल भी सर्वप्रथम यहीं बने। पत्थर में भी नर-मादा प्रकृति की खोज यहीं हुई। ऐसे अनेक प्रतिभाशाली बुद्धिमान वैज्ञानिक हमारे यहाँ हुए जिन्होंने कई दुर्लभ खोजें की। इनके नाम हमें सदा रमरणीय होने चाहिए, जैसे – कपिलमुनि, ऋषि कणाद, सुश्रुत, चरक, भास्कराचार्य, वराहिमहिर। संस्कृत सभी भाषाओं की जननी है। इस भाषा से ही मात्-पित अरब जाकर मादर-पिदर, वहाँ से ग्रीक जाकर मानेर-पिटर व आगे अंग्रेजी में मदर-फादर बने। प्राणिशास्त्र, धातु विज्ञान शास्त्र एवं समय की कालगणना में भी भारत शिखर पर उन्मुख था।

पिछली 20 शताब्दियों से हम संघर्षरत रहे। इस सतत् संघर्ष के कारण ही हम आज तक जीवित हैं। भारत पर तीन प्रकार के आक्रमण हुए। प्रारम्भ में एक हजार वर्षों तक यूनानी, शक, हूणों के आक्रमण। उसके बाद मुगलों के द्वारा आक्रमण और फिर 1757 से 1947 तक अंग्रेजों का आक्रमण। इन आक्रमणों ने सभी भारतीय व्यवस्थाओं का ताना बाना तोड़ दिया। इन्हीं आक्रमणों के बीच भारत के कई अंग अलग हुए। जैसे अफगानिस्तान, पाकिस्तान, बर्मा, श्रीलंका, नेपाल, भूटान, बांग्लादेश, तिब्बत आदि जो कभी भारत के ही अभिन्न अंग थे। हमारी अवनति के कारणों में प्रमुख 'आत्म—विस्मृति' एवं

असंगठित होना रहा है। यहाँ के व्यक्ति भूल गए कि वो भारतीय हैं। एक पर आक्रमण के समय दूसरे का चुप रहना। व्यक्तिगत जीवन की इच्छा रखकर सामाजिक दायित्व भूलना। मैकाले की शिक्षा प्रणाली से गलत अवधारणाएँ फैलीं और समाज का पतन हुआ। व्यक्ति एकल जीवन जीने की राह पर चल पड़ा। इस शिक्षा पद्धति से हमारे जीवन परक मृल्य खत्म हुए। हमारा संस्कृति ज्ञान विलुप्त हुआ। वर्तमान में भारत में जितनी समस्याएँ हैं उनका कारण स्वयं व्यक्ति है। वर्तमान में हम देखते हैं - सेना में अधिकारी रिश्वत लेकर गृप्त दस्तावेज बेचते हैं। राजनीतिक पार्टियों में भ्रष्ट मंत्री हैं। माँ अपने पुत्र की जान ले लेती है। पिता अपनी ही पुत्री का शोषण करता है। ऐसे अमानवीय उदाहरण हमें सोचने पर मजबूर करते हैं कि ऐसी कौनसी चीज है जिसके द्वारा यह सब हो रहा है। इन सबका सिर्फ एक और एक यही कारण है-व्यक्ति के चरित्र में गिरावट। यदि हम किसी तरह व्यक्ति का निर्माण सामाजिक जीवन मूल्यों पर कर सकें, तो उससे ही सभी समस्याओं का निवारण हो सकेगा। युवा वर्ग को यह सब देखकर स्वतंत्र रूप से विचार करना चाहिए कि स्वयं के द्वारा किस प्रकार इन सब चुनौतियों से लंड़ा जाए। वर्तमान नई पीढ़ी पर पाश्चात्य संस्कृति का इतना दुष्प्रभाव छाया हुआ है कि वह इस भोगपरायण संस्कृति का अन्धानुकरण कर रही है। पर हमें यह समझना चाहिए कि अपने देश के वेश, भाषा, और सदाचारों की हमें रक्षा करनी होगी। यदि हमने किसी दूसरे देश या संस्कृति का अन्धानुकरण किया तो उससे विनाश ही होगा, कीर्ति नहीं।

प्रत्येक देश की परिस्थिति अलग होती है। हमें अपने देश की स्थिति परिस्थिति देखनी चाहिए। आज अपनी संस्कृति और संस्कारों को भूलकर स्वार्थपरता के रथ पर सवार होकर हम जो जंग लड़ने जा रहे हैं, बहरूपी रंगों का समायोजन

उसमें कीर्ति नहीं है।

वर्तमान में भारत में लगभग 52 करोड़ युवा वर्ग है जो और किसी देश के पास नहीं। यह ऐसी शक्ति है जो किसी भी राष्ट्र की काया पलट कर सकती है। किन्तु जरूरत है सही दिशा की, सही सोच की। जरूरत है वर्तमान को बदलने की —

"गौरव मंडित अपना अतीत है भविष्य भी उज्जवल महान। आओ हम बदलें वर्तमान, आओ हम बदलें वर्तमान।"

यदि इस देश का प्रत्येक युवा एक बार मन में दृढ़ता से विचार कर ले कि अपने देश को शक्तिशाली बनाना है तो इस विश्व में कोई ताकत ऐसी नहीं जो भारत को परमशक्ति बनने से रोके। आज भारत माँ को जरूरत है ऐसे युवाओं की जो तरूण, मेधावी और पौरूष सम्पन्न हों तथा अपनी बुद्धि, यौवन, धन और जीवन भी भारत माता के चरणों में समर्पित कर दें। वर्तमान में भारत का दुनिया में सम्मान या अपमान हम युवाओं पर ही निर्भर है। इस भारत में जन्म लेने पर भी हम सत्कर्मी से दूर रहे तो हम अमृत के घड़े को छोड़कर विष के घड़े को पसंद करने वाले होंगे। यह देश हमें सब कुछ देता है, अब समय है जब हमें इस देश के लिए कुछ करना है। और फिर जीना तो उसी का सार्थक है जिसके जीने से अन्य लोग जिएँ। हम युवाओं को अपने अंदर ऐसे गुणों की वृद्धि करनी होगी जिससे स्वयं का ही नहीं, अपितु समाज का भला हो। चाहे उससे स्वयं का सुख नष्ट हो जाए। युवा देश के स्तंभ होते है। देश के स्तंभ मजबूत होने चाहिएँ तभी देश उठ सकेगा। किंतु आज युवावर्ग स्वार्थ भरे जीवन की कल्पनाओं में बह रहे हैं। युवा वर्ग अनेक मानसिक भ्रान्तियों से ग्रसित हैं। आज देश के लिए मरने वालों की नहीं अपित जीने वालों की जरूरत है। देशभक्ति सिर्फ देश के लिए जीना ही नहीं होता अपितु हम जहाँ भी जाएँ, जो कुछ भी करें उससे देश का हित हो, वही देशभक्ति है। हमारे कार्यों से देश की कीर्ति होनी चाहिए। देश की समृद्धि के लिए युवावर्ग ही साहस से यह कार्य कर

सकता है। अंत में एक प्रखर देशभक्त की अभिलाषा व्यक्त है –

यह मेरी मातृभूमि है, यह अखिल समाज मेरा है। इसका दुःख मेरा दुख और इसका सुख ही मेरा सुख है। इसके लिए मेरा सर्वस्व अर्पण हो। ऐसी प्रखर ज्वाला प्रत्येक युवा के हृदय में धधकनी चाहिए। किसी किव ने सही कहा है:

वह जीवन भी क्या जीवन है,

जो देश के काम आ न सका।

वह चंदन भी क्या चंदन है, जो सबका मन महका न सका।

–सुमित झालानी

प्रथम बी.टैक.

बढ़ती प्रतिस्पर्धा, बढ़ता मानसिक तनाव

प्रतिस्पर्धा एक तरह से आपस में आगे आने की होड़ है तथा आज के युग में प्रतिस्पर्धा हर रूप में विद्यमान है, चाहे वो देश—देश में प्रतिस्पर्धा हो या छोटी से छोटी वस्तु में हो। यह कई रूपों में होती है। प्रतिस्पर्धा में एक—दूसरे से तुलना होती है वो किसी भी रूप में हो सकती है। आज के युग में हर कोई किसी न किसी से अपने क्षेत्र में आगे आना चाहता है। वैसे तो प्रतिस्पर्धा विकास का रूप होती है जब तक की वो सही भावना से हो अन्यथा वह विनाश का रूप लेती है। आवश्यकता ही अविष्कार की जननी है, ठीक उसी प्रकार प्रतिस्पर्धा भी इच्छा व आवश्यकता से ही जन्म लेती है।

सभी देशों में हथियारों की होड़ है जिसमें हर कोई देश शस्त्र शक्ति में आगे आना चाहता है जो कभी भी विनाश का कारण बन सकती है।

इसी प्रकार आज के नए युग के अनुसार शिक्षा जगत में भी होड़ मची हुई है। आज एक पिता अपने पाँच साल से भी छोटे बच्चे को पढ़ाई के लिए इतना मजबूर करता है कि उसका शारीरिक व मानसिक विकास सही ढंग से नहीं हो पाता। जबिक यदि वही पढ़ाई अन्य गतिविधियों के साथ हो तो बहुत उपयोगी है। इस प्रकार अगर विद्यार्थी में प्रतिस्पर्धा नहीं हो तो वह आगे नहीं बढ़ सकता पर प्रतिस्पर्धा के साथ—साथ विद्यार्थी की सोच पॉजिटिव है तो वह निश्चित आगे बढ़ता है। जबिक यदि सोच पॉजिटिव नहीं है तथा वह किसी भी क्षेत्र में किसी से पीछे रह जाता है तब वही प्रतिस्पर्धा ईर्ष्या का रूप धारण कर लेती है।

आज के युग में कोई व्यक्ति किसी से भी प्रतिस्पर्धा करने के लिए सही रास्ते चुनता है तब तक वह सही है और अगर वह आगे जाने के लिए अनैकतिक हथकंडे अपनाकर किसी का बुरा करता है तब वह प्रतिस्पर्धा विनाशकारक बन जाती है।

इसी प्रकार आज के युग में मानव पैसे के लिए किसी भी हद तक जाने को तैयार हो जाता है, उसका एक कारण प्रतिस्पर्धा ही है।

कहते है कि स्वस्थ शरीर में स्वस्थ दिमाग निवास करता है तथा यदि मानव अपना मस्तिष्क प्रतिस्पर्धा के साथ—साथ अच्छे रूप में लगाए तब तो देश का विकास निश्चित हो जाएगा अन्यथा अगर वह अपना दिमाग गलत जगह प्रतिस्पर्धा के रूप में लगाता है तो वह मानसिक तनाव से पीडित हो ही जाता है।

आज समाज भी दो वर्गों में बंटकर रह गया है एक तो बहुत अमीर व दूसरा गरीब इसके पीछे भी प्रतिस्पर्धा ही है। आज भाई—भाई को मारने पर उतारू है उसका कारण धन या अन्य जमीन जायदाद की प्रतिस्पर्धा ही है।

इस प्रकार प्रतिस्पर्धा के बढ़ने के कारण लगातार मानसिक तनाव बढ़ता जा रहा है तथा देश का विकास भी नहीं हो पा रहा है।

> -पुष्पेन्द्र चौधरी प्रथम बी.टैक.

The Tre

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