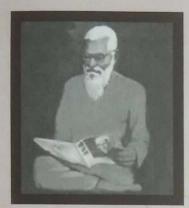


OUR MENTOR & PATH FINDER



Swami Keshvanand Ji (1883 - 1972)

VISION

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

MISSION

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

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Dear Readers

culture.

India is a land of diversity. It is a multi lingual, multi cultural, multi religious abode for a heterogeneous mix of people. This plurality and diversity calls for the need of a language that can be understood by all equally well. Language is the expression of the human personality in words, whether written or spoken. It is a universal medium for conveying the common facts and feelings of everyday life as well as the lofty thoughts of philosophers searching after truth. It is not only a means to communicate but also to forge friendships, cultural ties, and economic relationships. A language is a medium of communication; it mirrors one's identity and is an integral part

The education of language promotes the aesthetic sense and human values at becomes a means of liberation and social change and leads to enlightenment. It enables the learners to function as responsible citizens in the society and promotes an international outlook. It develops consciousness of rights and logical thinking. It helps to acquire humanistic values through communication with individuals, family and society. It promotes self reliance in the socio-political, economic and cultural fields and enables the learners not only to exchange knowledge, ideas and needs at the local, national and international levels but also enables them to critically evaluate the experiences and the opportunities of life and take decisions with discretion.

Effective communication has become the essence of one's personal and professional life. With companies going global, outsourcing jobs, working in international and geographically dispersed teams - the ability to communicate well in English has become the need of the hour. It has become mandatory for those who wish to participate in globalization and take advantage of what globalization offers in terms of culture, job, travel, technical knowledge and practice. English is a progressive, dynamic, and flexible language; moreover it is universally renowned for its power of expression and rich literature. A decent command of the four basic skills, viz. reading, writing, speaking and writing surely leads to other skills that are more complex and quintessential to a professional.

Dr. Niraja Saraswat Editor-in-chief

ORIENTATION OF B.TECH. I YEAR STUDENTS

CAMPUS LIBES On 6 August 2012, the SKIT family organized an orientation ceremony to welcome the new members to its family. Though the official ceremony began at 10:00 a.m., the senior students initiated the program with a cultural extravaganza. These were meanwright performances by the college choir and band. A few final year students also shared their experiences of the college with the entrants. The ceremony commenced with the lighting of lamps and Saraswati Vandana to invoke the blassings of the Almighty. This was followed by the felicitation and floral welcome of the esteemed guests Frof. B. F. Yaday (chief guest) and Mr. Rajendra Bhanawat (presiding guest).

Shri Surja Ram Meel ,Chairman, SKIT delivered the welcome address wherein he laid emphasis on a disciplined life and encouraged the students to utilize the four years at college to their fullest by becoming not only technically sound but also good human beings the also welcomed the parents present and asked for their valuable suggestions. Prof. (Dr.) 5.L. Surana, Director (Academics) shared the vision and mission of SKIT with the new students. He asked students to put their holistic devotion in studies as

well as in extracurricular activities with equal vigour. Mr. Jaipal Meel, Director, SKIT, assured the parents that the institution would do its best to nurture qualities like discipline, punctuality and sincerity among students.

The presiding guest, Mr. Rajendra Bhanawat, Managing Director, RIICO, emphasized the fact that each child is unique and has it's competency in one or the other field. There is a need to identify and nurture that talent. He read out an excerpt from Bill Clinton's biography

and warned students to never take things for granted and to be inquisitive.



After his motivating talk, Prof. R.P. Yadav, Vice Chancellor, Rajasthan Technical University addressed the gathering. He said that a good engineer is responsible for the country's progress and emphasized the importance of becoming industry ready by developing the requisite skills and knowledge. Quoting examples of the ex SKIT students who had achieved great success, he encouraged the students to grab opportunities and to inculcate leadership skills to become successful in life. Dr. S.K. Calla, Principal, SKIT proposed a vote of thanks. The second half of the session was marked by an enlightening speech by Dr. Satish K. Batra, an acclaimed academician. He kept the audience spellbound with his talk on positive appearance, happiness and satisfaction which can bring a profound change in life. He peppered his speech with stories and anecdotes and encouraged the students to strive for the goal, to have noble ideas and a purpose in life. Taking examples from real life heroes like Dhirubhai Ambani, he laid stress on the importance of perseverance and patience, saying that "winners never quit and quitters never win". With this invigorating speech the ceremony concluded.

BLOOD DONATION CAMP

Preservation of life by man is the next best thing to God's prerogative of creating life. Following the same spirit a voluntary blood donation camp was organized by Youth Red Cross Club in collaboration with Lions Club, Rotary Club, SMS Hospital, Santokhba Duralabhji Memorial Hospital, Jaipur and Swasthya Kalyan Blood Bank on 29 September, 2012. The inaugural function witnessed the gracious presence of Dr. Virendra Singh, Superintendent, SMS hospital as the chief guest and other dignitaries including Mr. M.L. Goel, President Lions Club, Mr. Govind Sharma, District Vice Governor, R.K. Lohariya, President, Rotary Club, Mr. Rajaram Meel, Chief Patron, SKIT, Mr. Surjaram Meel, Chairman, SKIT, Prof.(Dr.) S. L. Surana, Director(Academics) and Dr. S.K. Calla, Principal, SKIT. The programme commenced with a welcome address by Mr. Rajaram Meel. He welcomed the dignitaries and assured them that SKIT students would remain in the forefront in all societal concerns.

The chief Guest of the occasion, Dr. Virendra Singh, exhorted the younger generation to take a pledge and come forward to donate blood voluntarily. He made the audience aware of the hazardous effects of smoking and drinking. He lauded the efforts of the SKIT family in encouraging the youth and conducting the camp. Dr. S. K. Calla, Principal, SKIT proposed a vote of thanks. He expressed his gratitude towards Lions Club, Rotary Club and all dignitaries and also congratulated Mr. Ashish Nayyar, Reader, Dept. of Mechanical Engineering for successfully coordinating the programme. During the camp 700 units of blood was collected. The camp concluded by honouring the guest with a shawl and the donors with gifts.

INDEPENDENCE DAY CELEBRATION

Independence Day was celebrated with immense pride and solemnity. It spurred the students to respect, admire and emulate our national heroes. The celebration began with flag hoisting by the chief guest. At the outset Mr. Raja Ram Meel, Patron, SKIT explained the moral meaning of independence. He made the young minds aware of the dangerous consequences of corruption. According to him corruption in physiological, theological or moral discussions is a moral impurity and deviation from the ideal. In a moral sense corruption generally refers to decadence and hedonism. Mr. Anil Bafna, Vice Chairman, SKIT talked about the Indian culture and traditions. Founder Director Mr. K. R. Bagaria expressed his concern over the fact that our spirit of patriotism gets kindled on Independence Day and Republic Day only. We tend to forget it on the other days. He emphasized the need of planting more

trees, saving electricity, curbing corruption and eliminating the menace of ragging. Director of Academics Prof. (Dr.) S. L. Surana in a short and meaningful speech, drove home the significance of resources. He said that blind imitation of the western culture had proved to be too costly for the country. He invoked the audience to act as the custodians of society.

To encourage quality research work amongst the faculty members, certificates and cash awards were conferred. This year the recipients of the award included Prof. Sangeeta Vyas, Dept. of Chemistry, Prof. Archana Saxena, Head, Dept. of Chemistry, Dr. Niraja Saraswat, Head, Dept. of English, Dr. Pramila Kumawat, Sr. Lecturer, Dept. of Mathematics, Mr. Praveen K. Jain, Reader, Dept. of ECE, Dr. Sharda Soni, Reader, Dept. of Chemistry, Mrs. Archana Rai, Sr. Lecturer, Dept. of Mathematics, Ms. Rukhsar Zafar, Sr. Lecturer, Dept. of ECE and Dr. Anurag Sharma, Sr. Lecturer, Dept. of Chemistry. Dr. S. K. Calla, Principal, SKIT proposed a vote of thanks to the guests and speakers. The celebrations culminated in a cultural programme put up by the students in the memory of our freedom fighters and ended with distribution of sweets to all.

GUEST LECTURE HELD

A motivational seminar was jointly organized by Instrumentation Limited (IL), Kota, Rotary Club, Bapunagar, Jaipur and the Rotract Club of SKIT on 1 September, 2012. Er. P.M. Bhardwaj, Chairman and Managing Director, IL, Kota presided over the seminar as the chief guest. Er. P.C. Sanghi, President, Rotary Club, Bapu nagar, Jaipur also graced the occasion with his benign presence. Mr. Surja Ram Meel, Chairman, SKIT introduced the chief guest and briefed the students about the philanthropic projects of the Rotary Club. He also thanked the dignitaries for sparing their valuable time.

Er. P. M. Bhardwaj highlighted the importance of an industry-institution interface. He shared his personal experiences with the students and advised them to read the sayings of the holy saints and try to be good human themselves. He also expressed his belief that the Indian youth is a storehouse of tremendous energy. Laying much store by St. Kabir's sayings, he asked the students to believe in the supreme power of diligence and determination.

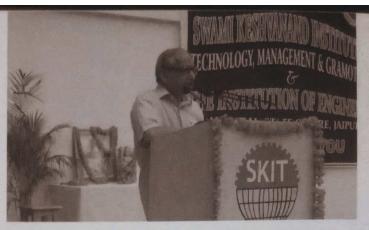
Dr. S.K. Calla, Principal, SKIT proposed a vote of thanks to the guests for motivating the students and unraveling the emotional aspects of the inner self.

PROF. G.R. VERMA'S DISCOURSE

A special session by Prof. G.R. Verma a noted mathematician was organized for students. He presented a motivational talk and discussed the importance of mathematics for students. Narrating the excerpts from his own life he shared that mathematicians have contributed with their utmost knowledge. He also enumerated the interesting ways to solve complicated sums.

ENGINEERS' DAY CELEBRATED

The Institution of Engineers, Rajasthan State Centre, Jaipur in collaboration with SKIT and Rotary Club, Jaipur celebrated the Engineers' Day with great fun and frolic on 15 September, 2012 to commemorate the great visionary and engineer Sir Mokshagundam Visvesvaraya. The celebration was marked by the gracious presence of



Mr. R. K. Sharma, Ex-Director, RSEB as the chief guest and Mr. J. L. Sehgal, Chairman, IE, RSC, Jaipur and Mr. P. C. Sanghi, IE member, RSC, Jaipur and current President of Rotary Club, Jaipur as the guests of honour. Prof. S. L. Surana, Director (Academics), SKIT welcomed the dignitaries and expatiated upon the significance of engineers in today's world. He asked the students to apply their scientific knowledge for the unprecedented growth of India.

Mr. J. L. Sehgal highlighted the need of celebrating the Engineers' Day as it involved recognizing the great work done by people like Dr. APJ Abdul Kalam, George Bell and Madam Curie. Mr. R. K. Sharma, the chief guest of the occasion enumerated the achievements of the legendary engineer Sir Mokshakgundam Visvesvaraya and explained the benefits of research on conventional technology. He also listed out the achievements of our country in developing nuclear technologies, meteorological advancements, quality of minerals and plethora of vaccines. Highlighting the vast opportunities for young generation in the field of engineering, he advised not to get confused due to the complexities but to be optimistic and progress ahead in pursuit of success. He also talked about the progress of India in the field of science and technology and the benchmarks set by Indians in various areas. Mr. P.C. Sanghi asked the students to abide by the rules of engineering ethics and not to follow things blindly. Dr. S.K. Calla, Principal, SKIT proposed a vote of thanks to the guests and wished all the budding engineers a bright career. The programme also included cultural events like solo song, group song and poems by the students. The program was coordinated by Mr. Sarfaraz Nawaz, Reader, Dept. of EE, Mr. Ankush Tandon, Sr. Lecturer, Dept. of EE and student representatives.

AWARDS AND HONOURS

SKIT has set a benchmark in foundation programme rollout which has been launched by Infosys Technologies Ltd. Bangalore. Aspirations 2020 is a platform for students of colleges to prepare themselves to become global professionals. The programming Contest under Aspirations 2020 encourages a spirit of competitiveness and accelerates learning through extra-curricular activities in the student community. Two students of SKIT, Archit Parnami and Arpit Joshi (B.Tech. V Sem. CS-A) have been chosen as one of the top programming team CROSSFIRE in the northern region in the nationwide Aspirations 2020 contest.

PLACEMENT INITIATIVES

 A team of Infosys Technologies Limited comprising Mr. Neeraj Garg, Manas Tyagi, Vinus Maud from Infosys Technologies Limited, Chandigarh Development Centre visited SKIT on 20 August, 2012 and conducted project presentations, presentations on soft skill and business intelligence. They also conducted a review meeting with campus connect faculty members and apprised them of the latest initiatives.

IE (I) STUDENT'S CHAPTER

The department of Electrical Engineering registered its students as members of the IE (I) Student's Chapter in July 2012, under the guidance of Mr. Sarfaraz Nawaz, Reader, Dept. of EE. It aims at promoting the general advancement of engineering, engineering science, It's applications, and facilitates the exchange of information and ideas amongst the members. IE (I) is a pioneer body which functions with and amongst professional engineers, academicians and research workers providing a vast array of technical, professional and support services to the government, industries and the academic and engineering communities.

PROJECT REWARDED BY BOSCH



An innovative project entitled "Multi-purpose Sieving Machine for Rural Applications" pursued by Mr. Anandi Lal Kumawat and Mr. Bhaskar Sharma (students of 2012 batch of B. Tech. Mechanical Engineering) under the guidance of Mr. Manoj Kumar Sain, Reader, Dept. of ME was recognized and awarded by Mr. Ram Murthy, Technical Head, BOSCH Ltd. Jaipur on 31 August, 2012. Prof. (Dr.) S.L. Surana, Director(Academics), Dr. S. K. Calla, Principal, faculty members and students were present in the ceremony.

CAMPUS CONNECT WEBINARS

- Campus Connect Webinar was held on "The World of Product Engineering" on 7 May, 2012. Mr Sudhir Srivastava, Delivery Manager, Engineering Services, Infosys Technologies addressed the faculty members. The purpose was to leverage the global project's experience of Infosys to create awareness about the use of IT in different industry verticals.
- Prof. M. L. Bhargava, Advisor, SKIT organized a Campus Connect Webinar on "Values and Ethics in Engineering Education" on 3 August, 2012.

IBM ACADEMIC INITIATIVE

IBM conducted a Rational Functional Tester (RFT) from 25-28 July, 2012 at SKIT premises. The introductory course is designed to familiarize professionals with the basics of the Rational test automation tools for use in testing Java, Microsoft VB net and HTML based Web applications. Testers can build, enhance and maintain scripts in a full-function Java IDE that integrates with the IBM Rational Software Development Platform products. Hands-on lab exercises were provided so that participants could explore the power of using Functional Tester. The Functional Tester application builds effective and resilient test scripts using Java code and Script Assure technology. The training was attended by 109 participants

and was conducted by Mr. Sunny Narang, Team Leader, IBM SWG. The programme was successfully coordinated by Ms. Jyoti Bhatnagar, Lecturer, Dept. of IT/CS.

NUKKAD NATAK



SKIT NSS Unit, in collaboration with Rotary Club, Jaipur organized a NUKKAD NATAK named "Give up Alcohol Addiction (স্থায়ে ক্রী জের)" on 23 September, 2012. It was enacted by the NSS students in the slum area behind Reliance Petrol Pump, Jagatpura, Jaipur. The NSS and Rotary Club student associates exhorted the slum dwellers to shun the habit of consuming alcohol through their banners. Mr. P.S. Sanghi, President and Mr. Ravi Shankar Sharma, Secretary of Rotract Club, Bapu Nagar, Jaipur were present in the programme. The programme was coordinated by Dr. Lalit Gehlot, Incharge NSS and Mr. Aman, Student President, Rotract Club.

INTRODUCTION TO ENTREPRENEURSHIP



An interactive session was organized for the registered students of TOPAZ, where Prof. M.L Bhargava, Advisor, SKIT and Ms. Maneesha Kaushik, TPO briefed the students about the importance of having an entrepreneurial spirit. They encouraged the students to follow innovative ideas to become entrepreneurs themselves.

GUEST LECTURES

Guest lecturers were organized by Technocrat Club on 23 and 29 August, 2012. Mr. Rohan Bhatia (former associate of Genpact) spoke to the students about the true meaning of success and an ideal journey towards it. He appreciated the initiative taken by Technocrat Club in bridging the gap between industry and academics. He also congratulated last year's meritorious technocrat students who had been awarded scholarships.

YUVA PRERNA PRATIYOGITA

SKIT and Vivekanand Kendra, Kanyakumari joined hands to organize a Yuva Prema Pratiyogita on 6 September, 2012. Almost 65 students appeared in the exam. Certificates will be awarded to all the participants. The programme was coordinated by Dr. Sharda Soni, Reader, Dept. of Chemistry.

SEMINAR ON COMMUNICATION SKILLS

On 13 September, 2012, an interactive seminar was organized for the faculty members where Ms. Geetha Ramamurthy, Executive Director of TIE, Boston emphasized the need of communication skills in all walks of life-familial, social and professional. She also asserted that English has acquired unlimited significance because it is not only the language of international business but also the language of the cyber world.

VOLLEYBALL TEAM WINS AT BITS, PILANI



SKIT boys volleyball team emerged victorious in BITS Pilani's annual sports meet. Colleges across the nation participated in the mega event. The students of SKIT defeated toughest of the teams on their journey of becoming champion. They defeated Jamia Milia Islamia in the semi finals which were considered as favourites to win the competition and finally bashed BITS Pilani to become champions. The hard work put in by the entire team under the guidance of Mr. Hiralal Choudhary has brought laurels to the college. Mahendra Choudhary was awarded the best player award.

Rajat Budania also won silver medal in weight lifting.

WORKSHOP ON BUILDING TECHNOLOGY VENTURES 2012

A workshop was conducted during 23-25 August in SKIT premises to integrate entrepreneurship with Engineering Education. It was addressed by Prof. C Amarmath, Professor, Department of Mechanical Engineering & Head-SINE IIT Mumbai, Mr. Rajendra Bhat Chief Membro, NEN and Mr. Vasanti-Venugopal, Educator, NEN. The programme aimed at providing engineering and business students with an intense, immersive entrepreneurial experience. It was built upon successful UF industry interaction model programmes such as the Integrated Product and Process Design (IPPD). The course offered a virtual situation as one of the participating students acted as the "CEO" of a hypothetical organization, the other posts being similarly were divided among different students. This helped them in homing their decision making skills. They were taught that understanding the accounting principles equally important in conducting business. The basics of financial management were also discussed during the workshop. The students

also learned frow to identify the target market and learner is written after getting it funded enter by angel investors or entrepreneurs thermodises. The workshop was coordinated by Mr. Maraestia Kaushik, Coordinator, E-Cell.

EXTRACURRICULAR ACTIVITIES

Under the banner of Extraositricular activities, two events - Sketching Competition and Rangoli Making have been organized in which several students participated. The events were successfully coordinated by Dr. Shalini Shekhawat , Lecturer, Dept. of Mathematics and Mrs. Chitra Munro, Lecturer, Dept. of Physics under the guidance of Dr. Vinita Sharma, Chief Coordinator, Extraosimoular activities. The following students won the competition:

On the Spot Sketching Competition

- 1. Aditi Gupta(III year, SCE)
- 2. Neetigklikhig Rathgraff year, ECE)
- 3. Akash Singh (I year, CS)

On the Spot Rangoli Competition

- 1. Mikita Panwar (I year, CE)
- 2. Weenalight Sharma (III year, EGE)

POISE EXTEMPORE DECLAMATION CONTEST

"POISE" (Personality Orientation through Interactive Skills Enhancement) was brought into being to prod the students to communicate in English and that it has been doing by organizing stimulating activities like G.D., P.I. and debates in its sessions at held Hindi and English extempore declamation contest for 8.7ech. If year students on 10 and 11 of October Extempore speeches are hard to make for they are carried out without any preparation or forethought. But the numbers and performance of the participants belied our fears.

Rajdeep Sukhwal of EC-8 with his witty and humonous speeches on "The Wall Clock" and "Bhole Bhale" in English and Hindi respectively was the winner in both the events and was awarded the gold medal. The I number up in Hindi getting the silver medal, was Sandeep Agarwal of IT-8. He delivered his speech on the famous poem of Ashok Chakradhar, "Bol Gappe". The bronze medal was won by Narendra Singh of EE who also bagged the silver medal in the English debate. Tripti Mathur of IT-8 spoke on the topic "Words" and was the II number up and thus got the bronze medal in the English counterpart of the event. It was a hardfought competition in both the events and it was warmly appreciated by a large and patient audience.

The guests of honour at the competitions were Prof. (Dr.) S.L. Surana, Director. (Academics.) and Dr. S.K. Calla., Principal, SKIT. The jury comprised Mrs. Abha Meel., Dr. Niraja Saraswat, Mr. Harmunder Singh and Mr. L.B. Abrol.. The masters of ceremonies were Ankol Jain and Mansi Patel for the English debate and Abhishek Savena and Jahnwi Sharma for the Hindi one. The entire event was a huge success with the active participation of the students and the hard work of the organizing committee led by Ms. Manisha Kaushik, Chief Coordinator. POISE

INDUSTRIAL VISIT BY FACULTY

INDUSTRY VISITED

CEERI Pilani

OBJECTIVE

To establish a research centre in SKIT

UMBE

6-7 September, 2012

WISITED BY

Prof. S. K. Bhatmagar, Head, Dept. of ECE Mr. C. P. Gupta, Reader, Dept. of ECE

INDUSTRIAL VISIT

To prepare students for global workplaces, illustrate theoretical concepts, and make abstract topics/concepts more concrete, industrial tours have been conducted:

ORGANIZED BY : Dept. of Mechanical Engineering

DATE : 13 August, 2012 INDUSTRY VISITED : BOSCH Ltd. Jaipur

FOR : B. Tech. VII Sem. Students

COORDINATED BY : Mr. S.B. Bheem, Reader, Dept. of ME, Mr.

Anandi Lal Kumawat, Lecturer and Mr. Vishal Vijayvergia, Lecturer, Dept. of ME

ORGANIZED BY : Dept. of Electronics and Communication

DATE : 27 September, 2012 INDUSTRY VISITED : Akashvani Kendra, Jaipur FOR : B. Tech. V Sem. Students

ORGANIZED BY : Dept. of Electrical Engg.

INDUSTRY VISITED : Biomass Plant, Univara - KALPTARU

Power Transmission Ltd.

FOR : V Semester Section B

ACCOMPANIED BY : Ms. Smriti Jain, Sr. Lecturer, Mr. Deepak

Pareta, Lecturer, Dept. of EE

DATE : 26 September 2012

WELCOME ARRIVALS

DEPARTMENT OF ELECTRONICS AND COMMUNICATION

- 1. Ms. Monika Mathur, Reader
- 2. Ms. Manju Chaudhary, Sr. Lecturer
- 3. Ms. Suman Sharma, Sr. Lecturer
- 4. Ms. Priyanka Sharma, Lecturer
- 5. Ms. Neelu Rathi, Lecturer
- 6. Mr. Neeraj Jain, Lecturer
- 7. Mr. Pankaj Soni, Lecturer
- 8. Mr. Prashant Kumawat, Lecturer
- 9. Mr. Sunil Lakhawat, Lecturer
- 10. Mr. Chandan Kumar, Lecturer

DEPARTMENT OF ELECTRICAL ENGINEERING

- 1. Mr. Tarun Naruka, Sr. Lecturer
- 2. Mr. Manoj Kumawat, Sr. Lecturer
- 3. Mr. Abhishek Gupta, Lecturer
- 4. Mr. Tarun Chawla, Lecturer
- 5. Mr. Tarun Kumar Chheepa, Lecturer
- 6. Mr. Avadesh Sharma, Lecturer
- 7. Mr. Manish Nain, Lecturer
- 8. Mr. Hemant Sharma, Lecturer
- 9. Ms. Jyoti Singh, Lecturer
- 10. Ms. Kavita Jain, Lecturer

DEPARTMENT OF ENGLISH

- 1. Dr. Lalit Gahlot, Sr. Lecturer
- 2. Mr. Janmejay Singh Bareth, Lecturer

DEPARTMENT OF CHEMISTRY

- 1. Dr. Meena, Sr. Lecturer
- 2. Dr. Swati Joshi, Sr. Lecturer
- 3. Dr. Poonam Ojha, Lecturer

DEPARTMENT OF MATHEMATICS

- 1. Mr. C. P. Jain, Sr. Lecturer
- 2. Mr. Nawal Kishore Jangid, Sr. Lecturer

DEPARTMENT OF PHYSICS

- 1. Dr. Bhavna Dalela, Reader
- 2. Dr. Komal Sharma, Reader
- 3. Mr. Ajay Kumar Sharma, Sr. Lecturer
- 4. Dr. Deepika, Sr. Lecturer
- 5. Ms. Reena Verma, Lecturer

DEPARTMENT OF

COMPUTER SCIENCE AND INFORMATION TECHNOLOGY

- 1. Mr. Sunil Dhankhar, Reader
- 2. Ms. Neeraj Choudhary, Reader
- 3. Mr. Pratipal Singh, Sr. Lecturer
- 4. Ms. Jyoti Kumawat, Lecturer
- Mr. Deepak Garg, Lecturer

DEPARTMENT OF MECHANICAL ENGINEERING

- 1. Mrs. Nowsath Begam.m.y, Reader
- 2. Mr. Monu Gupta, Lecturer
- 3. Ms. Sumita, Lecturer
- 4. Mr. Devendra Singh Yadav, Lecturer
- 5. Mr. Saurabh Gupta, Lecturer
- 6. Mr. Aman Vikram, Lecturer
- 7. Mr. Sanjay Chaudhary, Lecturer
- 8. Mr. Sanjay Bairwa, Lecturer
- 9. Mr. Suresh Chaudhary, Lecturer
- 10. Mr. Anandi Lal Kumawat, Lecturer
- 11. Mr. Bhaskar Sharma, Lecturer
- 12. Mr. Abhishek Kashyap, Lecturer
- 13. Mr. Vishal, Lecturer

DEPARMENT OF CIVIL ENGINEERING

1. Prof. L. N. Dutt, Reader

Prof. Dutt did his post graduation in Geology from University of Jammu and Kashmir in 1960. He also did certificate courses in Geotectonic and Earthquake Engineering sponsored by Government of India. He has a vast experience of more than four decades as a Geoscientist. As a professional Geologist in various capacities, he served for 30 years in G.S.I Government of India and for about 20 years as a professor in various prestigious engineering institutes both in India as well as in abroad. He has to his credit almost 22 research papers and government technical project reports published in various seminars, conferences and workshops. He has delivered several lectures on Indian Earthquakes in India and abroad. He has also delivered talks on environment awareness programmes and Earthquake Disasters Management on All India Radio, Television and through other media for the benefit of public. We hope that his vast experience of geological work and teaching will prove a boon for students as well as for the entire institute.

- 2. Mr. Deependra Singh, Lecturer
- 3. Mr. Manmohan Sharma, Lecturer

BOOKS PUBLISHED

TITLE : Product Development and Launching.

AUTHOR : Prof. Alok Mathur, Dept. of ME

TITLE : Manufacturing Processes.

AUTHOR : Mr. Dheeraj Joshi, Reader, Dept. of ME

TITLE : Industrial Engineering-I.

AUTHOR : Mr. Dheeraj Joshi, Reader, Dept. of ME

TITLE : Advanced Mechanics of Solids.

AUTHOR : Mr. Manoj Kumar Sain, Reader, Dept. of ME

TITLE : Object Oriented Programming

AUTHORS : Prof. (Dr.) C. M. Choudhary, Head, Dept. of

CSE, Mr. Mahendra Kumar Beniwal, Reader, Dept. of CSE, Mr. Pankaj Dadheech, Reader,

Dept. of CSE

TITLE : Programming in Java.

AUTHORS : Prof. (Dr.) C. M. Choudhary, Head, Dept. of CSE,

Mr. Mahender Kumar Beniwal, Reader, Dept. of

CSE, Mr. Pankaj Dadheech, Reader, Dept. of CSE

RESEARCH PAPERS PUBLISHED

TITLE : Accreditation of Undergraduate Engineering

Degree Programmes in India: Changes due to

Washington Accord.

PUBLISHED: Journal of Engineering, Science & Management

Education, Vol-5 Issue-II (445-451)

AUTHOR : Dr. N.K. Banthiya, Head, Dept. of ME

TITLE : Sequential Design and Implementation of 2D-DCT.

PUBLISHED : ICEEE-2012, International Conference for

Electronics & Electrical Engineering

AUTHOR : Ms. Suman Sharma, Sr. Lecturer, Dept. of ECE

TITLE : Improved Design of photonic crystal waveguide

with electrical hole for enhance slow light

performance.

PUBLISHED: International Journal, Optical Engineering 51 (6),

064001, June 2012, SPIE

AUTHOR : Ms. Rukhsar Zafar, Sr. Lecturer, Dept. of ECE

TITLE : Multiband circularly polarized micro strip patch

antenna for mobile communication.

PUBLISHED : International Journal of Soft Computing and

Engineering, ISSN- 2231- 2307, Vol-2, Issue -3, July

2012

AUTHOR : Mr. Mukesh Arora, Reader, Dept. of ECE

TITLE : Introducing New Meta Search Model through

Content based Image Retrieval Algorithm.

PUBLISHED : International Journal of Computer Applications

IJCA (0975 - 8887) Volume 52- No.13, August 2012

AUTHOR: Mr. Pankaj Dadheech, Reader, Dept. of CSE

TITLE : L.R.S. Bianchi type V Cosmological Model with Heat

Conduction in General relativity.

PUBLISHED: Proc. Computatia -2012, pp 81-85 published by

Rajasthan Academy of Physical Sciences

AUTHOR : Dr. Pramila Kumawat , Sr. Lecturer, Dept. of

Mathematics.

TITLE : History and Myth in Shashi Tharoor's The Great

Indian Novel.

PUBLISHED : International Journal of Language, Literature and

Literary Theory. Oct 2012. Vol 1 Issue 4. ISSN-

2277 3967

AUTHOR: Dr. Nidhi Sharma. Sr. Lecturer, Dept. of English.

TITLE : Art of Story Telling in Tharoor's The Great Indian

Novel

Published : Contemporary Discourse : an International

Journal. ISSN 0976-3686, Vol 3 Issue 3.

AUTHOR : Dr. Nidhi Sharma, Sr. Lecturer, Dept. of English.

: Reduction of Distribution Losses by Combined

Effect of Feeder Reconfiguration and Optimal

Capacitor Placement

PUBLISHED : International Journal of Recent Research and

Review, Vol. II, June 2012

AUTHOR : Mr. Sarfaraz Nawaz, Reader, Dept. of EE

TITLE : Improved Design of Photonic Crystal Waveguides

With Elliptical Holes for Enhanced Slow Light

Performance"

PUBLISHED : International Journal of Optical Engineering, SPIE,

51(6), 064001 June 2012

AUTHOR : Ms. Rukhsar Zafar, Sr. Lecturer, Dept. of ECE

RESEARCH PAPERS PRESENTED

TITLE : Energy Saving Through Biomass Gasification.

CONFERENCE: National Conference on Energy Efficient System

Design And Manufacturing

DATE : 31 March, 2012
VENUE : VIT Campus, Jaipur

AUTHORS : Mr. Manoj Kumar Sain, Reader, Ms. Anshul Singh,

Lecturer, Mr. Nitin Goyal, Lecturer, Dept. of ME

TITLE : Railway Tie: Dynamic Composites.

CONFERENCE: National Conference on Energy Efficient System

Design and Manufacturing

DATE : 31 March, 2012 VENUE : VIT Campus, Jaipur

AUTHORS : Mr. Dinesh Sharma, Lecturer, Mr. Praveen

Saraswat, Lecturer, Dept. of ME

TITLE : A New Approach for Designing Rectangular Micro

Strip Antenna

CONFERENCE: National Conference MICROWAVE - 2012.

DATE : 31 July- 2 August, 2012

VENUE : S.S. Jain Subodh P. G. College, Jaipur
AUTHOR : Prof. S.K. Bhatnagar, Head, Dept. of ECE.

TITLE : Remote Monitoring System Based on Embedded

System.

CONFERENCE: All India Seminar on Convergence of

Telecommunication Technologies and Computers.

DATE : 14 April - 15 April, 2012

VENUE : MNIT, Jaipur

AUTHOR : Mr. Sarabjit Singh, Sr. Lecturer, Dept. of ECE

CONFERENCE/ WORKSHOP ATTENDED

CONFERENCE : Renewable Energy and Climate Change.

VENUE : SMS Convention Hall, Jaipur

ORGANIZED BY : Confederation of Indian Industries

DATE : 27 July, 2012

ATTENDED BY : Mr. Ankit Agarwal, Lecturer, Dept. of ME

WORKSHOP: Faculty Development Programme.

VENUE : SKIT, Jaipur

VENUE

DATE : 23 - 25 August, 2012

ATTENDED BY : Mr. Anandi Lal Kumawat, Lecturer, Dept. of ME

SUMMER SCHOOL: Present Status of Higher Education and Future

Challenges - Special Summer School 2012.

: UGC Academic Staff College, University of

Mumbai

DURATION: 23 July - 11 August, 2012

ATTENDED BY : Dr. Vinita Sharma, Reader, Dept. of Chemistry

CONFERENCE : National Conference on LTCC Technology.

VENUE : CEERI, Pilani

DATE : 6 - 7 September, 2012

ATTENDED BY : Mr. C.P. Gupta, Reader, Dept. of ECE

WORKSHOP : Hardware and firmware Design for ARM based

Embedded System

VENUE : CDAC Hyderabad DURATION : 18 - 29 June, 2012

ATTENDED BY : Mr. C.P.Gupta, Reader, Ms. Shweta Sharma, Sr.

Lecturer, Dept. of ECE

WORKSHOP : System Design Using FPGA and Network Security

and Malware Analysis.

VENUE : CDAC Hyderabad
DURATION : 14 May - 25 May, 2012

ATTENDED BY : Ms. Sheetal Verma, Reader, Dept. of ECE

WORKSHOP : Infosys Campus Connect - Faculty Workshop on

Nurturing an Industry Ready Professional.

VENUE : PEC University, Chandigarh
DATE : 12 - 14 September, 2012

ATTENDED BY : Ms. Richa Rawal, Ms. Sanju Choudhary, Lecturer.

Dept. of CS/IT

WORKSHOP : Deep Dive Faculty Enablement Program -

Business Intelligence & Applications.

VENUE : Development Center, Infosys Ltd., Chandigarh

DATE : 2 - 6 July, 2012

ATTENDED BY : Mr. Harpreet Singh Gill, Sr. Lecturer, Ms. Rubal

Gill, Sr. Lecturer, Dept. of CSE

WORKSHOP : Providing Exposure To Academia on Cloud

Computing, Identity & Access Management (IAM), Project & Portfolio Management (PPM) and Independent Solution Vendors (ISV)

VENUE : Infosys Campus Connect Project, Infosys Ltd.,

Chandigarh

DATE : 11 June- 3 August, 2012

ATTENDED BY : Mr. Mehul Mahrishi, Sr. Lecturer, Dept. of CSE

WORKSHOP : An Advance Course on Commercializing your

Product-Getting to Market

ORGANIZED BY: NEN at ICFAI Mumbai

DATE: 13-15 September 2012.

ATTENDED BY: Ms. Maneesha Kaushik, TPO

WORKSHOP : Campus Connect Deep Dive Faculty Enablement

Programme - Business English

VENUE : Infosys Technologies Limited, Chandigarh

DATE : 9-11 October, 2012

ATTENDED BY : Dr. Lalit Gehlot, Sr. Lecturer, Mrs. Neha Purohit,

Sr. Lecturer, Dept. of English

TECHNICAL SESSIONS CHAIRED

EVENT: National Conference MICROWAVE - 2012

DATE : 31 July - 2 August, 2012

VENUE : S.S. Jain Subodh P. G. College, Jaipur
CHAIRED BY : Prof. S.K.Bhatnagar, Head, Dept. of ECE

EVENT: National Conference on Advances in Wireless and

Optical Communication Systems (AWOCS-2012)

DATE : 17 March - 18 March, 2012

VENUE : SKIT, Jagatpura, Jaipur
CHAIRED BY : Prof. S.K.Bhatnagar, Head, Dept. of ECE

EVENT : National Conference on Microwave Devices and

Components.

DATE : 22 March, 2012
VENUE : Global Institute of Technology, Jaipur

CHAIRED BY : Global Institute of Technology, Jaipur

Prof. S.K.Bhatnagar, Head, Dept. of ECE

EXTERNAL/INTERNAL EVENTS JUDGED

EVENT : M. Tech., I Sem., Practical Examination for the

Communication Systems Lab.

DATE : 26 March, 2012

VENUE : Government Engineering College, Ajmer.

JUDGED BY : Prof. S.K.Bhatnagar, Head, Dept. of ECE

EVENT : M. Tech. Dissertation of Mr. Satya Narayan Vijay

DATE : 17 April, 2012

VENUE : Jaipur Engineering College, Jaipur
JUDGED BY : Prof. S.K.Bhatnagar, Head, Dept. of ECE

CHIEF GUEST/GUEST OF HONOUR

EVENT: AVION 2k12 (Department Day Celebrations of

Department of Electrical Engineering)

DATE : 30 March, 2012

VENUE : Poornima Institute of Engineering & Technology,

Jaipur

CHIEF GUEST: Prof. S.K.Bhatnagar, Head, Dept. of ECE

EVENT: World Telecommunication Day.

DATE : 17 May, 2012

VENUE : Arya College of Engineering and Information

Technology, Jaipur

CHIEF GUEST: Prof. S.K. Bhatnagar, Head, Dept. of ECE

DEGREE AWARDED

Ms. Rajni Idiwal, Lecturer, Dept. of ECE
 Awarded M.Tech. in Digital Communication from Govt.
 Engineering College, Ajmer

Ms. Monika Mathur, Reader, Dept. of ECE
 Awarded M. Task, in Princeton Control of ECE

Awarded M.Tech. in Digital Communication from Jaipur Engineering College, Jaipur

INVITED TALKS

TITLE : Two invited talks on A. An Overview of MEMS Basics B.
Technologies and Materials for MEMS Structures in the

Technologies and Materials for MEMS Structures in the Short Term Course on Recent Trends in Electronics and

Communication Engineering

VENUE : MNIT, Jaipur

DATE : 26 June - 27 June, 2012

SPEAKER: Prof. S. K. Bhatnagar, Head, Dept. of ECE

TITLE: LTCC Technology for Photonic Microsystems: An overview, at the IETE Seminar on Photonic Devices and LTCC

Technologies

VENUE : CSIR-CEERI, Pilani

DATE : 6 September - 7 September, 2012 SPEAKER : Prof. S. K. Bhatnagar, Head, Dept. of ECE

RENEWABLE ENERGY: FUTURE DEVELOPMENT IN INDIA

Power is among the most important infrastructure requirements for the development of a society. Industry and urbanization demand a constant reliable source of energy, which is presently supplied by only large scale power generation plants which totally depend on fossili fuel reserves in the country. But they are fast depleting everywhere. Moreover, fossil fuels are the remains of decomposed plants and animals. A steam power plant heats water to create steam, which turns a turbine, which in turn generates electricity, waste heat, and pollution. The pollution and other side effects need to be checked to stall climate change. Despite environmental risks, electricity generation is required to be continued and increased because it is a basic input for mankind and is a very flexible and convenient form of energy. From the environmental angle also electrical energy is preferable to other forms of energy because although there are environmental risks in its generation, it is very clean and environment friendly in its end use.

Renewable sources, particularly solar and wind energy are free gifts of nature to mankind. If adequately harnessed, the entire requirement of energy of the world can be obtained from the sun. However, the present and growing global demand of energy cannot be met in the immediate future by these sources. Besides the conventional sources, non-conventional sources which are available in abundance and are sufficient for long time to come cannot be left untapped. In Rajasthan the solar and wind energies are abundant in potential and require to be tapped properly.

Every one appears to agree on the need to increase the percentage of renewable energy but there has not been any concerted action towards achieving it. The nature of ownership, management and governmental policies has also had an impact on the growth of the renewable sector which is dominated by the private sector in generation, transmission and distribution in most of the developed world.

Historically, solar technologies were propagated in India for off-grid applications. What is attempted here is to present the logic, imperative, and the vision behind the recent policy developments leading to a multimegawatt -scale grid-connected application of solar photovoltaic and solar thermal technologies. In theory, 1% of India's land, if utilized for solar generation, could supply all the country's electricity needs by 2030. However, if this potential of solar energy is to be achieved in practice, it should, in the long term, meet the three important criteria of cost, availability, and reliability. First, the cost must be competitive with at least the highest-priced electricity produced from liquid fossil fuels, which means that the tariff should come down to about Rs 10 per kWh. This price can also be justified by insisting on taking into account the cost of externalities of conventional power in its pricing. Solar power generation is emission-free and the money thus saved can be considered in offering it a preferential tariff. Secondly, solar power should be 'dispatchable', which means power must be available when customers need it. Therefore, energy storage will become critical for large -scale grid-connected development of solar power. Several new storage technologies are being developed and the potential for their development is significant. However, the cost effectiveness of the solar generation project with storage would be important. Reliability can be ensured by a judicious grid mix of such diverse renewable sources as hydro, geothermal energy, and biomass. Modern technologies for energy forecasting and dispatch management can also help.

On 30 June 2008, the Prime Minister's Council on Climate Change

approved the National Action Plan on Climate Change (NAPCC). The new outlook is best explained in the introductory paragraph of the NAPCC. Undia is faced with the challenge of sustaining ht rapid economic growth while dealing with the global threat of climate change. This threat emanates from accumulated greenhouse gas emissions in the atmosphere. The NAPCC outlined its implementation strategy through the establishment of eight national missions. Of these, two were in the field of energy, namely, the national solar mission and the national mission for enhanced energy efficiency.

The National Solar Mission is a major initiative taken by the government of India and the state governments to promote ecologically sustainable growth as India.

The National Solar Mission is a major initiative taken by the government of India and the state governments to promote ecologically oustainable growth and India's energy security challenge. The mission states that the National Tariff Policy, 2996 would be modified to mandate that the state electricity regulators fix a percentage for the purchase of solar power. The solar power purchase obligation for states may start with 0.25% in phase I and is to go up to 3% by 2020. This is proposed to be complemented with a solar specific Renewable Energy Certificate (REC) mechanism to allow utilities and solar power generating companies to buy and sell certificates to meet their solar power purchase obligations.

The important target set in the National Solar Mission by 2013 solar collectors is 7 million Sq. m.by year 2017, 15 million sq. m, 20million Sq.m. by year 2022, off grid solar applications 200 MW by 2013, 1000 MW by 2017, 2000 MW by year 2022 and utility grid power including rooftop 1000-2000 MW by year 2013, 4000-10000 MW by year 2017 and 20000 MW by year 2022. If we sum up the total renewable energy potential in India by all sources, say wind, hydro biogas, biomass, solar and geothermal, 7, 14,000 MW which is five times our current installed capacity, the relative PLF annual generation becomes 2347.7 billion units.

Transition to a renewable energy economy is not just about energy, it is about achieving sustainable development which poses numerous institutional challenges. The 'Spotlight' section in this issue focuses on this particular aspect. Any number of policies, any array of technologies or large quantum of money cannot ring in this transition if institutions which are supposed to make it happen are not prepared or equipped to do so. This challenge has to be met head-on by governments, industry, non-government organizations, academia and the civil society. Even though mindsets are the most difficult to change, albeit at a small's pace, there are any number of climate realists who can rise above the 'Tower of Babel' constructed by planet-saving crusaders and work consistently to create a renewable energy economy.

DR. S.K. CALLA, Principal, SKIT

MICROWAVE SYNTHESIS -A GREEN REVOLUTION IN CHEMICAL SYNTHESIS

fire is rarely used in the chemistry labs for synthetic purposes. If we look at history of heating resources, we find that Robert Bunsen invented the Burner in 1855 and later came heating mantles, oil baths and hot plates as a source of applying heat to a chemical reaction. Now a Days in most of the research labs use of microwave energy as a source of heating for chemical reactions has been popularly used by scientific community.

First of all Gedye and Giguere/Majetich in 1986 [1], reported the use of microwave irradiation to carry out organic chemical transformations. Thousands of articles have been published in this exciting field which is generally referred to as microwave-assisted organic synthesis (MAOS) [2, 3].

Advantages of this enabling technology

- Microwave heating reduces reaction times
- It increases product yields
- It enhances product purities by reducing unwanted side reactions compared to conventional heating methods.
- Very few Solvents are used.

Use in varied fields

- in the medicinal chemistry/drug discovery [4]
- in the context of multistep total synthesis [5]
- material sciences & polymer synthesis [6]
- Biochemical processes [7].
- Nanotechnology [8]

The statement that, in principle, any chemical reaction that requires heat can be performed under microwave conditions has today been generally accepted as a fact by the researchers.

The short reaction time provided by microwave synthesis make it ideal for rapid reaction scouting and optimization of reaction conditions, allowing very rapid progress through the hypotheses-experiment-results iterations, resulting in more decision points per unit time. In order to have full benefit from microwave synthesis one has to be prepared to fail in order to succeed. While failure could cost a few minutes, success would gain many hours or even days.

As with any new technology, the current situation is bound to change over the next several years and less expensive equipment should become available. By then, microwave reactors will have truly become the Bunsen burners of the twenty first century and will be standard equipment in every chemical laboratory.

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- [6] Millos, C.J., Whittaker, A.G. and Brechin, E.K. (2007) Polyhedron, 26, 1927-1933.
- [7] Sandoval, W.N., Pham, V., Ingle, E.S., Liu, P.S. and Lill, J.R. (2007) Combinatorial Chemistry & High Throughput Screening, 10,751-765:
- [8] Langa, F. andde la Cruz, P. (2007) Combinatorial Chemistry & High Throughput Screening, 10,766-782.

PROF. ARCHANA SAXENA Head, Dept. of Chemistry MR. PRAVEEN JAIN Reader, Dept. of ECE

PARABOLIC TROUGH SOLAR POWER TECHNOLOGY

Introduction

Solar energy represents a huge domestic energy resource for the India. particularly in the west where the deserts have some of the best solar resource levels in the world. In addition, solar power is often complementary to other renewable power sources such as hydroelectric and wind power. The solar resource is typically higher during poor hydroelectric periods and solar output peaks during the summer whereas wind power typically peaks in the winter. Solar power can be complementary to fossil power sources as well. The coal dominated power utility in South Africa with one of the lowest power costs in the world has identified large-scale solar power technologies as a good intermediate load power source for its grid. Although some renewable power technologies provide an intermittent energy supply, large-scale thermal electric solar technologies can provide firm dispatchable power through the integration of thermal energy storage. Thermal energy storage allows solar thermal energy collected during the day to be used to generate solar electricity to meet the utility's peak loads, whether during the summer afternoons or the winter evenings. Although solar energy is abundant and free, it is a diffuse energy source so the cost to harness (or harvest) it with solar collectors can be significant. As a result, electricity generated from solar energy is currently more expensive than power from conventional fossil power plants.

However, studies indicate that even at moderate levels of deployment, large-scale solar power can potentially complete directly with conventional fossil generation. Although many solar technologies have been demonstrated, parabolic trough solar thermal electric power plant technology represents one of the major renewable energy success stories of the last two decades. Parabolic troughs are one of the lowest cost solar electric power options available today and have significant potential for further cost reduction. Nine parabolic trough plants, totaling over 350 MW of electric generation, have been in daily operation in the California Mojave Desert for up to 18 years. These plants provide enough solar electricity to meet the residential needs of a city with 250,000 people. They have demonstrated excellent availabilities and have reliably delivered power to help California to meet its peak electric loads, especially during the California energy crisis of 2000-2001 (near 100% availability during solar hours). Although parabolic trough technology is the least cost solar power option, it is still more than twice as expensive as power from conventional fossil fueled power plants at today's fossil energy prices.

Working of parabolic trough power plant

Parabolic trough power plants use concentrated sunlight, in place of

fossil fuels, to provide the thermal energy required to drive a conventional power plant. These plants use a large field of parabolic trough collectors which track the sun during the day and concentrate the solar radiation on a receiver tube located at the focus of the parabolic shaped mirrors. A heat transfer fluid passes through the receiver and is heated to temperatures required to generate steam and drive a conventional Rankine cycle steam power plant.

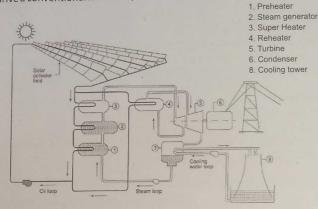


Figure 1 Parabolic Trough Power Plant

Conclusion

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Solar technologies have the potential to be major contributors to the global energy supply. The ability to dispatch power allows large-scale central solar technologies to provide 50% or more of the energy needs in sunny regions around the world. In addition, because parabolic trough technology is built from commodity materials such as glass, steel, and concrete, and standard utility power generation equipment, it is possible to scale-up and rapidly deploy new trough power plants. Large-scale solar technologies can provide energy price stability as well as quality jobs to the local community. Solar energy has the potential to become the major new domestic energy resource in the 21st century.

References

1. http://solarcellcentral.com/csp_page.html#parabolic_troughs 2.http://en.wikipedia.org/wiki/Parabolic_trough

MR. MANOJ KUMAR SAIN, Reader, Dept. of Mechanical Engineering

JUST PURE SMILE

You give me comfort
During the storms clouding my life,
Wiping my tears off, In those tiving times.
Always lending a hand, In the trials of life's harsh times
Keeping my secrets at the same time,
Threatening to spill them out.
You are the rainbow of my life,
You colour the grayness of my thoughts with,
The freshness which touches
Every morning with its dewy prime.
You are the madness which brings
Saneness to my life, And everything which makes
It lovable and fine.
What are you? You're just my pure smile.
Divya Mittal, III B. Tech., IT

NANO SOLAR CELLS

Current solar power technology has little chance to compete with fossil fuels or large electric grids. Today's solar cells are not efficient enough and are also too expensive to manufacture solar panels for large-scale electricity generation. However, potential advancements in nanotechnology may open the door to the production of cheaper and slightly more efficient solar cells.

Conventional solar cells have two main drawbacks. Firstly their maximum efficiency is only around ten percent and secondly they are expensive. The first drawback, low efficiency, is almost unavoidable with present silicon cells. This is because the incoming photons, or light, must have the right energy, called the band gap energy, to knock out an electron. If the photon has less energy than the band gap energy then it will pass through. If it has more energy than the band gap, then that extra energy will be wasted as heat.

Nanotechnology might be able to increase the efficiency of solar cells, but the most promising application of nanotechnology is the reduction in manufacturing cost. Chemists at the University of California, Berkeley, have discovered a way to make cheap plastic solar cells that could be painted on almost any surface. These new plastic solar cells utilize tiny nanorods dispersed within in a polymer. The nanorods behave as wires because when they absorb light of a specific wavelength they generate electrons. These electrons flow through the nanorods until they reach the aluminum electrode where they are combined to form a current and are used as electricity. This type of cell is cheaper to manufacture than the conventional ones for two main reasons. First, these plastic cells are not made from silicon, which can be very expensive. Second, manufacturing of these cells does not require expensive equipment such as clean rooms or vacuum chambers. Instead, these plastic cells can be manufactured in a beaker.

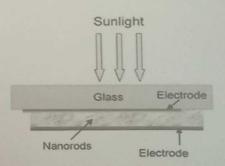


Fig.1- nano solar cell

Another potential feature of these solar cells is that the nanorods could be 'tuned' to absorb various wavelengths of light. This could significantly increase the efficiency of the solar cells because more of the incident light could be utilized.

Technology Advantages;-

The Nanosolar cell is the industry's most cost-efficient solution for utility-scale deployment of solar power.

Through its systems-optimized design, the Nanosolar cells deliver significant balance-of-system cost savings relative to standard thin film panels:

		Film	Nanosolar Advantage
Power	Nanosolar	Standard Thin Film	Up to 3x More Power per Layup Step
Panel Length	200-240W	80W	Up to 40% Less Mounting Material
(Mounting Span)	2m (1.16m)	1.2m (~0.7m)	65% Fewer Strings and Less Cabling
Open-circuit Voltage	47.1V @ 200W	57.1V @ 80W	
System Voltage	1500V	1000V	79% Fewer Strings and Less Home Runs
Connector	Edge	Standard	85% Faster Connection

Combining silver nanowires, titanium dioixde nanoparticles and a polymer that absorb infrared light to make a solar cell that is about 70 percent transparent to visible light, allowing it to be used in windows. Titanium dioxide nanotubes is filled with a polymer to form low cost solar cells carbon nanotubes and buckyballs to efficiency solar cells. Some researchers combine the nanotubes and buckyballs with a polymer, while another group of researchers are only using nanotubes and bucky balls.

Researchers at Stanford University have found a way to trap light in organic solar cells. The idea is that the longer light is in the solar cell the more electrons will be generated. The researchers found that by making

the organic layer much thinner than the wavelength of light and sandwiching the organic layer between a mirror layer and a rough layer the light stays in the solar cell longer and excited more electrons.

- 1. http://www.tahan.com/charlie/nanosociety/course201/nanos/
- 2. http://theconversation.edu.au/solar-technology-could-transformoffice-blocks-into-power-producers-5968

PRAVEEN SARASWAT, Lecturer, Dept. of ME

A SMART SOLAR TECHNOLOGY DEVELOPED

Solar energy is the abandoned source of energy and the faster growing technology also. But higher cost of solar panels is the obstacle in its popularity and utility. To overcome this major problem the RTI internationals have developed a less costly and more efficient technology for solar cells. The RTI solar cells are formed from solutions of semiconductor particles, known as colloidal quantum dots, and can have a power conversion efficiency that is competitive to traditional cells at a fraction of the cost. The RTI-developed solar cells were created using low-cost materials and processing techniques that reduce the primary costs of photovoltaic production, including materials, capital infrastructure and energy associated with manufacturing. Preliminary analysis of the material costs of the technology show that it can have 75% less cost than traditional cells.

"Solar energy currently represents less than 1 percent of percent of the global energy supply, and substantial reductions in material and production costs of photovoltaics are necessary to increase the use of solar power," said Ethan Klem, a research scientist at RTI and coprincipal investigator of the project. "This technology addresses each of the major cost drivers of photovoltaics and could go a long way in helping achieve that goal.'

"The efficiency of these devices is primarily limited by the amount of sunlight that is absorbed," said Jay Lewis, a senior research scientist at RTI and the project's other principal investigator. "There are many wellknown techniques to enhance absorption, which suggests that the performance can increase substantially."

In demonstration tests, the cells consistently provided power conversion efficiency more than 5 percent, which is comparable to other emerging photovoltaic technologies. The cells, which are composed of lightweight, flexible layers, have the potential to be manufactured using high volume roll-to-roll processing and inexpensive coating processes, which reduces capital costs and increases production. Unlike traditional solar cells, the RTI-developed cells can be processed at room temperature, further reducing input energy requirements and cost.

In addition to being low-cost, the new cells have several other key benefits, including higher infrared sensitivity, which allows the cells to utilize more of the available solar spectrum for power generation. It is appearing as smart technology in solar technology field and hopefully it will contribute in power generation with high percentage.

Reference:

E. J. D. Klem, C. W. Gregory, G. B. Cunningham, S. Hall, D. S. Temple, J. S. Lewis. Planar PbS quantum dot/C60 heterojunction photovoltaic devices with 5.2% power conversion efficiency. Applied Physics Letters, 2012; 100 (17): 173109 DOI: 10.1063 /1.4707377

DINESH KUMAR SHARMA, Lecturer, Mechanical Department

A WISH

I had a dream last night, of being there with you. Your arms were warm around me, strong yet gentle too.

> I saw your soul, deep in your eyes. Someone was there, but it wasn't a surprise.

My name was written across it, my eyes were looking out. There in your precious soul, my love a home had found.

It filled my heart with warmth, enough to keep us both There it was nourished, within the soul loves grows.

I woke up wishing, Wanting it to be true. I know you live in mine, and I long to live in yours too.

Mr. Vivek Kumar Jain, Lecturer, Dept. of Physics

THE TIME MACHINE!



CAN WE REALLY TRAVEL INTO THE FUTUREY

Yes Right new we are travelling I second per second into the future. But if we want to move further into the future, either we shall have to were centuries until humans can travel at near light speech or we can live to less gravity. The latter is what Cosmonaut Serger Anderen did the currently holds the record for the longest period of time travel experienced by a human. He travelled about 0.07 seconds forward in future.

The other way to travel into the future is through a black hole. A black hole has a dramatic effect on time, slowing it down far longer than anything else in the galaxy. That makes it a natural time machine. Moreover, travelling at nearly the speed of light also acts as a time machine. When we travel at nearly the speed of light, time slows down for us more than for anyone else in the galaxy, for example, if we travel for 1 year at 95% the speed of light, we will age a year; but for the others, it will be 7 years.

However all this is not as easy as it seems to be. We can't even harness or create the amount of energy it takes to time travel. No one has really seen a worm hole or a black hole, and the negative energy required to create it and then make it bigger, isn't available. And the most important factor, getting a human to travel near the speed of light is an enormous task as no one knows whether humans can survive it. But nothing is impossible in this world, not even the time machine. So, friends, fasten your seatbelts and get ready to fly into the future.

ANKITA TAYAL, I B. Tuch., ECE

Every thing should be made as simple as possible, but not simpler.

Albert Einstein

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ENGINEERING WORLD GONE WILD IN INDIA

Engineering is now no more a coveted dream for Indians. Oh yeah! The much awaited increase in the number of IITs, IIITs and NITs in ARICEDOS CORCE India encourages describing our motherland as a hi-tech country enriched with speed and accessibility omitting the word 'inaccessible' from dictionaries through new inventions. It is a fine scene from the perspective of those students who are blessed with intellectuality trained by impeccable tuition lesson or by rare innate human feature of problem solving or it must b fundamental foundation facilities at high schools. Oh! It is fabulous to imagine students who day dream about their engineering as an arduous and challenging philosophy with a great thrill and adventure while profusely cracking technical jokes. Please, look at an average student who due to uncounted reason secure feeble score in high school or any entrance test like AIEEE and the destiny is decided which is self-financed private engineering colleges or universities; even if the scores are critically low then self-financed deemed universities and colleges can provide shelter. Government is not less than God because those students who are even ineligible for taking admission in BA, BBA or BCA at government college due to high cut-offs in the present time can find a life-giving opportunity at self-financed academic and technical engineering colleges or universities. These institutions are under the control of government universities or other bodies like societies or councils like AICTE in India but this system needs more governmental check to ensure the real counseling and then quality academics along with research and indispensably career oriented extra-curricular activities. 'Counseling for the sake of counseling' is perhaps the reality where those students are burdened and declared absolutely fit who are actually physically or mentally unfit because admission is given only on the basis of only entrance score cards and the money a student offers.

Remember all those cases which a teacher experiences where students lose their sanity due to pressure where they are studying or even some time lose their life. Indian Government should introduce an independent counseling government body- the moral support council- where the presence of the few psychologists should be made mandatory for these institutions to guide a student to have a right choice of career. Teachers at these private institutes should be recruited through a common government test with distinct eligibility criteria and a one more new government governing body should work at a regular basis at every private college or university to eliminate any plagiarism in any national or international conference organized proudly by private institutions with the collection of unchecked fake papers. Everything is ok but more efforts are silently demanded by that every student who loses confidence, self-motivation, and exam scores and easily even life under the pressure of wrong academic system every year in India.

DR. LALIT GEHLOT, Sr. Lecturer, Dept. of English

GET OUT OF THE RING

We, the commoners, tend to stay in our quagmire situation, as we are throughout our life because we tend to traverse a safer side on every occasion for, we tend to sail only when there are no storms and the sea is clement. But those who tend to sail and dare to satiate their ever greedy soul in the troubled waters and during the milieu of draconian waters, are the one who get to the next rung of prosperity and splendour. Well, it has been rightly said by many, that only those who tend to take risks and traverse the road less travelled are those who lie on either side of the so called "stay safe zone". Those who stay in the "safe zone" tend to make sure that their bread and meager butter stays in a continuous supply. These are the men who would spend most of their lives on ensuring that their basic needs are satisfied first.

But surprisingly neither are those in the lesser number who tend to break loose their manacles and step over to get out of the vicious life circle. These are the men which I wish, that all of should strive to become. For these, are the set of people which the current scenario of the world needs the most. But to become someone whom all we can do is, delineate in the mist their bodily figure, is no cake walk task. So that's what I wish you all to do explore yourself to determine to whom does that figure belongs to and what all would it require you to become a carbon copy of that figure. It is no easy task and neither can anyone point to a particular direction and announce "follow the direction to which my fingure points to and you will reach to thy goal". So all can I say is before you step out to launch yourself in the market, make sure that you are yourself. The more you get to know of thyself the more efficiently would you be able to handle the quagmire situations. I am often reminded of what Gandhiji had said "A man is but the product of his thoughts, what he thinks he becomes."

GAUTAM SIHAG, IV B.Tech., CS

THE UNTRAVELLED PATH

Life moves on...the ultimate truth! And quite obviously there has to be a path which needs our footsteps to travel. We can never precisely judge an untravelled path but once started we can precisely work to achieve what we have been dreaming for. Success doesn't come by just asking, one has to pay for it and that can be your days and night or something that cannot be enumerated. Obstacles turning on your way might try to break you and somehow dominate you but flowing with their flow is not an option.

"Never forget that only dead Fish swim with stream"

Learn to believe what you choose and should always be eager to pay what is required, constant hard-work and sincere efforts. Working with lots of questions, in mind never give answer rather working with an empty mind and finally answer seems better. Questioning your own strength will put a question mark on you only, it is better questioning the problem and solving it with all our strength. By the time you gain success travelling many ups and downs, you gain dominance over such qualities which you cherish always and after. Learn to kick every problem with such an enthusiasm that it turns into a goal.

EKTARANI, III B. Tech., IT

WE CREATE OUR LIFE....

Always wait for something good and it happens, because whatsoever happens is our own creation. We sow its seeds. But we sow the seeds unconsciously; that's why we think it has happened accidentally. Nothing is ever accidental. It is a cosmos, not a chaos in which we live.

We constantly create our world. There are people who are all the time worried that something wrong is going to happen; and then it happens! No one knows they have made it happen... Faint hearted people will always find situations in which fear grips them. Affectionate people will always find situations where love blossoms. Life goes on giving you that which you project. For every hurt one should feel thankful, because sometimes it is pain that is needed for growth, not pleasure. Use that opportunity as a spring board for something higher.

Life is a brief affair, a 70 odd year affair in which one-third goes in sleeping, another one-third in earning bread and butter and the balance in other stupidities... So, enjoy every second of your life...make each passing moment happy and memorable. We make life what it is. So relish it. Shine in every phase of life. Make it worthwhile and blossom as a daisy with each ray of the bright rising Sun. Flowers come from the seeds we sow, not from our wishes. We are the creators. That is the essence of Life!

APOORVA MUKHERJEE, I B.Tech., ECE

PATRIOTISM

"Regret that you have only one life to lose for your country"

We all say that we love our motherland. Are we all patriots then? Or are we just ordinary citizens making tall claims whose significance we don't understand? Patriotism doesn't mean short and frenzied outbursts of emotions on 2-3 days in a year. Boisterous agitations against your corrupt government, senseless acts of violence in the name of protest don't define patriotism. Patriotism is a steady and tranquil dedication of a lifetime to your country. Today days like 15 August or 26 January have become mere public holidays. Even on these 2 days in a year we don't spare a thought for our nation .We find it so demanding to wake up early and attend a ceremony of such importance .We never introspect about our duties towards our country.

A true patriot hates injustice in his own land more than anywhere else. The present scenario in our country is dismal: injustice is all around us, injustice in the shape of corruption. Our national leaders are detested, our supreme law making body the parliament is used as a tool of mutual

mockery by politicians. Politics has become a vicious thing and the educated people shy away from it. Politics needs to be purged. We need educated and spirited people to enter the electoral system. We must stop complaining that our choice is limited between a rock and a hard place. We must create our own choices .Yes, there will be sacrifices, many battles will be lost but eventually the war will be won.

We live in an era where the lure of western culture and lifestyle has turned our youth away from our national ideals. We are quick to find short comings in our system and pass pessimistic comments about it, but we are not ready to work and change it. No one thinks of changing himself. The youth of today is very keen to work abroad and live a lavish life. Why not work in your own country to which you are indebted in so many ways? Former US president John F Kennedy said" Ask not what your country can do for you, ask what you can do for your country".

I would like to say patriotism means what our late Prime Minister Rajiv Gandhi once said, "let me declare here and now that we shall not deviate from our goals .Lets us make no mistake the challenges that our country faces are no ordinary challenges. There are forces in this world which want to see India falter in its internal squabbles. There are forces that encourage terrorism and aim to deflect us from our chosen path. These forces must be met squarely. This is only possible if we place national interest above any individual, party or group."

This is what patriotism means; this is what our country needs. Jai Hind.

NIVEDITA JHA, I B. Tech., ECE

NATURE THE TEACHER

We come across many teachers who play a really important role in shaping our life, but we just ignore a wonderful teacher who is within the reach of all, that teacher is NATURE. Nature is not just beautiful but also great. There are many things we can learn from it. See how. Take mountains first, They are a symbol of strength and will. They have made themselves so strong that nothing can move them. Why can't we learn from them to face the difficulties that come our way without breaking down?

Rivers are ever on the move, steadily and continuously till they meet the sea. Why don't we learn from them to move in the direction of our goal equally relentlessly? Trees teach us the lesson of kindness and giving. Just as even after being by a stone they give a fruit in return and always provide shade to the passerby irresespective of his identity, Why can't we try to be kind and humble to one and all and try to give more than we get?

From the sun we can learn to be responsible and punctual as even when there are clouds, it doesn't forget its job of providing light and tries to shine from behind the clouds. why can't we try to carry out our responsibilities even if it seems impossible? And last but not the least, look at our mother earth which gives us all she has without expecting anything in return, and continues to feed us even when we do not acknowledge our gratitude to her and never try to protect or preserve her.

We human beings always try to learn through words. Little do we know that we can learn better from nature which speaks a silent language of love and giving which we have forgotten but can relearn, if only we have the desire to.

KOMAL MOTWANI, I B.Tech., ECE

I AM SCARED

I am scared. I really am. While we have heralded social media as the proverbial mouthpiece for the common man(and I am talking about India's net savvy populace here. It's better to explain these things before they are taken out of context), what we haven't taken into account is dissemination of hatred and prejudiced opinion. Sure, in the earlier times discontentment was discussed over lunches and in the confines of your own homes. Now it is visible wherever you go online. I have nothing against discontentment but when it becomes abusive and personally attacks a person, that's what makes me scared. When it doesn't stem from viable cause, that's what makes me scared. When it does nothing but sow the seeds of prejudice, that's what makes me scared.

So what am I talking about? Thousands and thousands of idiots trolling away happily under YouTube videos and Times of India e-articles abusing Pakistan, abusing the Government, abusing just about anyone that makes them mad. Mad enough to vent their anger through carefully chosen words that neither reflect maturity nor any traces of education. Though the 70s were called the era of the 'angry young man', I think the adage applies to today more than any other time. People who should be angry over their situation today - Farmers whose livelihoods depend on the rain, widows demanding the pension that is rightfully due to them but denied, parents who lose their children to drunken driving or acts of terrorism or acts of mob violence, young girls sold to prostitution houses - don't seem to be angry enough about their situation. At least the net doesn't seem to be seething with their rants. The cudgels are taken up by the 'Angry Young Netizen' who swears to get justice one minute but forgets the next as he tunes in to 'Two and a half men' and then returns to the internet to heap abuse on everyone diluting the seriousness of the very cause he is supposedly supporting. I'm not saying that standing up to injustice is wrong but it shouldn't be done on Facebook to prove a point to yourself (and to your 500 or so friends) that you are taking social responsibility. Choose effective means like signing petitions, writing open letters, pledging money rather than just being angry all the time. I admit that I am not politically correct all the time. But I'm not a hypocrite either. I'm tired of seeing this pent-up anger everywhere. If you don't agree with something, give a rational and polite rebuttal or swallow your pride and ignore it. Just stop abusing!

DIVYA MITTAL, III B.Tech., IT

SEE DREAMS, VISUALIZE THEM

In the currently emerging scenario, the human mind is ablaze with continuous innovations. In this fast paced environment, we are all running after fame, money and materialistic things. I don't say that it is wrong; it is today's requirement to have a good image in your home, society, and friends. We all have an inbuilt tendency to create magical aura around our respective fields. Most of us live our hectic routine life purposelessly without knowing what is lacking in it i.e., DREAMS. I do not mean those dreams which we have at night while sleeping but the vision, the aim, the desire which you want to accomplish. Albert Einstein says "what we dream is what we do ". When Andre Agassi won Wimbledon, he was asked how it feels like. He replied "I have already won Wimbledon at least 10,000 times before." At first people laughed because they thought he was joking but when Andre explained that he had visualized himself winning the tournament thousands of times, people become aware of the power of the visualization of dreams.

Visualization is a very powerful tool that can help you reach your goals if you use it correctly. Lots of people confuse visualization with day dreaming. While the latter is just a helpless attempt a desperate person makes in order to feel good about himself, the former is a way that

motivates the mind and ignites the passion towards reaching a certain goal. Why do people become addicted to a certain bad habit? Because they tried the habit more than once and liked it, or liked the emotions associated with it. So if a person never manages to experience a certain habit, most probably he will never get addicted to it. Now what does this have to do with success and visualization? If you never managed to taste the feelings you are going to experience when you achieve your goals, then you will never become motivated to pursue them. How do you want to fight for something for months or even years without having any idea about the reward or the feelings you will get after achieving it?

Here comes the powerful role of visualization; by imagining how life would be like after achieving your goals, you will become much more motivated to pursue them. How to visualize your goals? In order for visualization to be very effective you need to do the following:

- * Visualize details: I heard that Agassi said that he visualized the T-shirt he was wearing when he won the tournament, the sounds of people cheering for him and the feelings he would get when he touched the cup. In short you need to visualize the slightest details in order to intensify the experience.
- * Visualize the performance and final results: don't just visualize yourself after achieving your goals but instead visualize yourself performing well, then visualize the final result. The images that you construct during visualization act as instructions sent to the brain. Your mind will do its best to apply these instructions you are sending to it.
- * Repetition is the key: The more you visualize your performance and dreams the more will your subconscious mind absorb them and the more likely will they turn into reality.

Let us understand this visualisation therapy with an example of a very brave person ABRAHAM LINCOLN who in his life overcame great setbacks and obstacles on the road of his journey.

He was born on 12 February 1809.

- 1816 His family was forced to live out of their home and needed to work.
- 1818 His mother passed away.
- 1828 His sister died.
- 1831 A business venture failed.
- 1832 He ran for state legislature. He lost. He lost his job too.
- 1833 He borrowed money from his friend, which he could not return.
- 1834 This time he won for the state legislature.
- 1835 His fiancée died and he was grief stricken.
- 1836 Total nervous breakdown and bedridden for 6 months; could not become speaker of state legislature.
- 1840 He sought to become elector but was defeated.
- 1842 Marries marry Todd, had 4 boys and only one could live upto adolescence.
- 1843 Lost congress elections.
- 1846 Won congress elections and went to Washington.
- 1848 Lost re election for congress.
- 1850 Son Edward died.
- 1854 Lost elections for senate of US.
- 1856 Lost vice presidential nominations.
- 1858 He ran for senate again. He lost again.
- 1860 He was elected as president of US.
- 1862 Son Willie dies.
- 1865 April 14, he was assassinated.

Now see whether we would have the courage to continue still.

RISHAB JOSHI, I B.Tech., ME

उस रात कृष ऐसा लगा

जब इम पहली बार घर छोड़कर बाहर निकलते हैं तो हमें बड़ा खालीपन लगता, अकेलापन महसूस होता है। यद्यपि जैसे-जैसे क्कर गुजरता है इम सामान्य हो जाते है। वो पहली रात जो अपने घर से दृर बिताई थी उसके लिये कुछ पीक्तयां:

उस रात क्षिएसा लगा जैसे सागर से नदियाँ किनाया कर गई हो एक मुददत को मेरी हैंसी, घर लौट गई हो। जैसे पहाड़ो का एक हिस्सा ट्ट कर गिर पड़ा हो, चिडिया का शहजादा, मां के लिए तड़प रहा हो।। उस रात कुछऐसा लगा जैसे रूह में कोई दस्तक दे रहा हो, ये दिल भटककर युमता बेराह हो जैसे मौज मस्ता और आवाज की छिन गई हो मुंह खोलकर हँसने की अदा, मुझसे हिन गई हो।। उस रात कृष्णेसा लगा जैसे खामोरा नम मुझे आइना दिखा रहा हो, नाजक से दिल को, पत्थर बनना सिखा रहा हो।। क्यं आँखा से ये दर्व बह न पाया, पत्तों की हलचल भी जैसे गुस्सा दिला रही हो, एक छोर खालीपन से मुझको मिला रही हो वो रात इतनी लम्बी थी कि लगा जैसे कर गई हो दिन से दगा उस रात कृष्णेसा लगा

अनुराग गर्ग, तृतीय वर्ष, संगणक अभियात्रिकी

रक्तदान महादान.....

एक माँ बैठी अपने बेटे के सिरहाने पे इंश्वर से अपने बेटे के जीवन को बचाने के लिए लगा रही थी गुहार तभी पिता आकर बोले नहीं मिला इसको चढ़ाने के लिए खून मैं गया थक हार ये हमारे मारत की कैसी लाचारी है, 120 करोड़ आबादी होने के बाद मी ना जाने कितने लोगों ने खून न मिलने के कारण, जिदंगी से जंग हारी है आप भी किसी की जिदंगी बचा सकते हैं, उदास चेहरे पर खुशियां ला सकते हैं मानवता के खातिर रखे या ध्यान, आपका रक्त दे सकता है किसी को जीवनदान याद रखें रक्तदान महादान, चार दिन की जिदंगी में कृष्ठ सहारा में बनूँ मुस्कान लाने के सफर में इल्तजा मेरी भी हो, इंसान हम इंसान बनें, इंसानियत का पाठ हैं

विवेक नरेदा, बी,टेक. प्रथम वर्ष, इलेक्ट्रोनिक्स और कम्यूनिकेशन अभियात्रिकी

सफलता को पाना है तो.....

चिराग अग्रवाल, बी.टेक. द्वितीय वर्ष, सगंणक अभियात्रिकी

सुन्दर देश बनाओंगे ? तुम क्या सुन्दर देश बनाओंगे ? देश मांगता है परिवर्तन और तुम मांग रहे हो आरक्षण आरक्षण के बल पर आगे बढ़ कर क्या कर पाओंगे त्म क्या सुन्दर देश बनाओं ? जाति का आरक्षण मांगा धर्मों का आरक्षण मांगा लिंगभेद आरक्षण पाकर कैसे देश बनाओं ? तुम क्या सुन्दर देश बनाओंगे ? शिक्षा में आरक्षण पाया सेवा में आरक्षण पाया कौन सी सेवा करके तम सन्दर देश बनाओंगे आरक्षण ही लेना है तो बुद्धि से आरक्षण लो आओ बैठो करो सामना प्रतिभा से आरक्षण लो आरक्षण से तम बने वैद्य हो तम क्या दर्द मिटाओंगे तुम क्या सुन्दर देश बनाओंगे ? आरक्षण के बल पर खुद को तुमने गुरू बना डाला

तुम पया पुन्दर वरा बनाजाण ?

आरक्षण के बल पर खुद को तुमने गुरू बना डाला

आरक्षण की सीढ़ी चढ़कर अभियंता का पद पा डाला
कौन सा यंत्र लगा के तुम उमन देश उठाओंगे?

तम क्या सन्दर देश बनाओंगे ?

तुम क्या सुन्दर देश बनाओगे ? देख नेना एक दिन देश को मेरे आरक्षण का दानव खायेगा या फिर बदनेगा नाम देश का आरक्षण देश कहायेगा ऐसे ही पद चिन्हों पर चल तुम क्या कर पाओगे तुम क्या सुन्दर देश बनाओगे ?

गौरव अग्रवाल, बी,टेक. प्रथम वर्ष, यात्रिकी एवं संचार अभियात्रिकी

इंजीनियर वो है जो

इंजीतियर वो है जो अक्सर फंसता है इंटरव्यू के सवाल में बड़ी कंप्रियों की चाल में, बॉस और क्लाइंट के बवाल में इंजीनियर वो है जो एक गया है मिटिंगस की जलेबी में सबीमहान की गहराई में, टीमवर्क की चटाई में इंजीिन्यर वो है जो लगा रहता है रोड्यूल को फेलाने में टारगेटस को खिसकाने में, रोज नये -नये बहाने में इंजीतियर वो है जो लंब टाइम में ब्रेकफास्ट करता है डिनर टाइम में लंच करता है कम्युनिकेशन के वक्त सोया रहता है इंजीिल्यर वो है जो पागल है, चाय और समोसे के प्यार में कोक के खुमार में, बर्डवाचिंग के विचार में इंजीनियर वो है जो खोया है रिमाइंडर के जवाब में ना मिलने वाले हिसाब में, बेहतर भविष्य के ख्वाब में इंजीनियर वो है जिसे इंतजार है वीकेंड नाइट मनाने का बॉस के एटटी जाने का, इंक्रिमेन्ट की खबर आने का इंजीनियर वो है जो सोचता है, कारा पढ़ाई में ध्यान दिया होता कारा टीचर से पंगार ना लिया होता, कारा इसक ना किया होता और सबसे बेहतर तो ये होता कम्बख्त इंजीनियरिंग ना किया होता पुष्पेन्द सिंह, बी.टेक. प्रथम वर्ष, इलैक्ट्रिकल अभियात्रिकी

असफलता खोलती है सफलता के द्वार

प्रत्येक व्यक्ति जीवन में आगे बढ़ना चाहता है, सफलता प्राप्त करना चाहता है और यही उसके जीवन की यात्रा का सहज एवं स्वामाविक प्रेरक तत्व भी है। सफलता की दिशा में किये जए प्रयास के बावजूद देखा जाता है कि असाधारण योज्यता, प्रतिभा, शिक्षा एवं साधनों वाले व्यक्ति भी जीवन में स्वयं को प्रायः असफल मानते है, जबकि सामान्य-सी पिरिस्पित में जन्में, सामान्य शिक्षा एवं प्रतिभा वाले व्यक्ति भी सफलता के चरम शिखर पर पहुँच जाते हैं। इन दो तरह के व्यक्तियों का सुक्ष विश्लेषण करने पर इस रहस्य का विमोचन हो जाता है कि सफलता का सबसे महत्वपूर्ण तत्व है, अध्यवसाय की वृत्ति। इसी के कारण कृष्टव्यक्ति अपने अभावों एवं व्यक्तिगत न्यूनताओं के बावजूद अपने लक्ष्य को सिद्ध करने के प्रयास में डिज रहते हैं जबकि दूसरे थोड़ी ही असफलताओं के बावजूद अपने लक्ष्य को सिद्ध करने के प्रयास में डिज रहते हैं जबकि दूसरे थोड़ी ही असफलताओं के बाव मेदान छोड़कर भाग निकलते हैं। अध्यवसाय की सफलता के लिए विख्यात मनोवैद्यानिक नेपोलियन हिल ने कहा है कि अध्यवसाय की सफलता के लिए विख्यात हाना प्रथम एवं अनिवार होती है।

लक्ष्य के लिश्चित होने के बाद उसको मूर्त रूप देने की व्यवहारिक योजना बनाना इसका अगला घरण है, परन्तु यदि योजना अपने सामर्थ्य का यथार्थ आकलन करते हुये बनाई जाये तो वह राम व औचित्यपूर्ण होनी अन्यथा अपनी क्षमता से बाहर की दिवास्वानी ये।जना प्रथम चरण में क्षे पृथिक की हिम्मत तोड़ देती है।इससे वह मानसिक रूप से प्रशस्त हो जाता है।उसका आगे बढ़ते का सारा मनोबल खत्म हो जाता है।उसका प्रयोक कदम उत्साह के साथ आगे बढ़ता जाए, इसके लिए आवस्यक है कि उसके द्वारा प्रारंभ में छोटे—छोटे कार्य सफलतापूर्वक क्रियानित किए जाएं। अन्वर के धंसात्मक, निराशावादी विचार प्रशति की दिशा में बढ़ रहे चरणों को रोककर सफलता की आशा पर पानी फेर देते है।प्रतिकृत प्रिस्थितियों की विश्व माड़ी में यदि व्यक्ति हिम्मत न हारें और प्रयास करते रहे तो इससे उबरने का मार्ज मिल सकता है। हाथ पर हाथ घरे बेटे रहने से दुर्जीत निहिस्त है।स्य क्षका रहने से इसते है।

असफलता मात्र एक अवसर है दुबारा प्रयास करने का, लेकिन अधिक बुद्धिमतापूर्ण ढंग से। प्रत्येक असफलता को पलायन की बजाय एक चुनौती के रूप में स्वीकारना ही श्रेयस्कर है। तमी हम अगला प्रयास अधिक उमंग के साथ कर सकते है। असफलता के बारे में सबसे मजेदार बात यह है कि इसका इसका कोई असितत्व नही है। यह मन की एक कल्पना मात्र है। यह मानसिक दृष्टिकोण की उपज है, मानसिक क्षमता की नही। याद रखें, हमारी प्रतिक्रियाएँ हमारे जीवन को कभी असफलता का वॉटरल् बनाती है। याद रखें, हमारी प्रतिक्रियाएँ हमारे जीवन को कभी असफलता का वॉटरल् बनाती है तो कभी सफलता की विजयभूमि। अल्प्रेड एल्डर के अनुसार जीवनित्रंतर विजय व पूर्णता के उच्चतर सोपानों की ओर बढ़ता है। उसे असफलता की ओर नही मोड़ा जा सकता। सार रूप में, कोई असफलता हमारा तव तक क्षणनहीं विगाद सकती, जब तक कि हम उससे सबक लेते रहे और आगे बढ़ने का प्रयास करते रहें। यदि हमारे हदय में अपने लक्ष्य के प्रति अनाध श्रद्धा एवं विश्वास है, तो मार्ग की असफलताएँ एवं सामियक पतन मी हि।सा देते हुए हमारी सफलता का मार्ग प्रशस्त करेंगें। फिर तो समस्त अभाव, अपूर्णता, दुर्बलता व प्रतिमा की कमी के बावजूद हमारी जीतम सफलता उतनी ही सुनिश्चत होगी, जितना कि लम्बी सारित के बाद उनने वाला अस्किएम सुर्य।

राजदीप सुख्ववाल, बी, टेक. द्वितीय वर्ष, यात्रिकी एवं संचार अभियात्रिकी

अभिव्यक्ति

भारतीय पश्चिश में सामाजिक अभिव्यक्ति का महत्व उसी तरह है जिस तरह पुष्प का उसकी सुगंध से है। भारतीय समाज मानवीय गुणों के आधार पर व्यक्ति की परख करता है जो सात्विक गुण व्यक्ति के पश्चिययक होने के साथ साथ उसकी विशेष अनुकम्मा को साधारणतः प्रदर्शित करने में सक्षम होते हैं। वे क्षेमुल धारणा के अनुरूप उस व्यक्ति विशेष की अभिव्यक्ति कहलाते हैं।

सरल भाषा में कहा जाए तो अभिव्यक्ति हैं। आज के युवा वर्ग की स्वतंत्रता को निर्धारित करती है। भौतिकवाद की चरम सीमा पर स्थित पश्चिमी सभ्यता का प्रभाव एशियाई देशों में भारत के आने वाले कल पर भी पड़ता हुआ नज़र आ रहा है। पश्चिमी समाज में अभिव्यक्ति का लक्ष्य सिर्फ पृणास्पद, मुखंतापूर्ण और हिंसावादी मानवीकरण है। वहाँ के एकायामी समाज में हमारे समाज की भौति सांप्रदायिकता और विविधता की बहुतायत नहीं है।

अतारव भारतीय मूल में अभिव्यक्ति को परिभाषित करने हेतू यहाँ की सहिष्णुता एवम् वैचारिक आस्था को ध्यान में रखना अत्यावश्यक है। अब देश के नेतृत्व की बागडोर सबल युवा में थमाने का समय आ गया है। ऐसे में अभिव्यक्ति की महत्ता और अधिक हो जाती है। हमें चाहिये कि नौजवान अस्थायी और सतही अभिव्यक्ति का बहिष्कार कर सहनरीलता, आत्मियंतन और अध्ययन के मार्ग का अनुसरण करें ताकि वैशिवक प्रतिस्पद्धों के आगामी युगो में हमारी अभिव्यक्ति अन्य देशों के लिए आगामी युगों में हमारी अभिव्यक्ति अन्य देशों के लिए प्रेरणास्त्रोत बने और मानवता की बुलिंद यों को अग्रसर हो।

संकल्प

संकल्प नया लेना होगा, संकल्प नया लेना होगा। जीवन को नवनीत बनाए हम।लक्ष्य को सुलम सजाए हम।जंगारो को श्रृंगार बनाए हम। कॉंटो को कोमल बनाए हम।एक नए प्रभात को पाने के लिए हपोंत्कर्ष करना होगा। संकल्प नया लेना होगा, संकल्प नया लेना होगा।।

सुरज की आभा को पाकर, उमंग से भर जाए हम। नवनीत के उत्यान को हर्ष से उठाए हम। दुर्जनत्य पथ को गन्तव्य बनाए हम। आशा के गलियारे को शीर्ष से सहेज पाए हम। संशय के उन्मूलन में दृढ़ित पथ को आत्मान्त्रित करना होगा। संकल्प नया लेना होगा, संकल्प नया लेना होगा।।

> जीवन में अदभुत विस्मय को समसत् बनाए हम। सोम रिव के रस से वातानकल हो जाए हम। दुःख्य की चादर को सुख्य का कफन बनाए हम। जीत को नींव और हार को आहार बनाएं हम। आतुर मन से धैर्यपूर्वक लक्ष्य भेद करना होगा। संकल्प नया लेना होगा, संकल्प नया लेना होगा।

संकीर्णताओं के भिरि को घरा का गर्त बलाए हम। अभिमान को स्थाभिमान बलाए हम।। परबहा की सात्विकता में एक दी हो जाए हम। मयुरत्व के मस्तक का ताज दी बल जाए हम। निश्चित चांदनीमय निशा में तेजोन्मादन बोध करना होगा। संकल्प नया लेना होगा, संकल्प नया लेना होगा।।

संजय सैनी , बी,टेक, द्वितीय वर्ष, शास्त्रा – यांत्रिकी अभियांत्रिकी

' माँ '

माँ,माँ संवेदना है, भावना है अहसास है।माँ,माँ जीवन के फुलों में खुरावु का वास है।। माँ,माँ रोते हुए बच्चे का खुरानुमा पालना है।माँ,माँ मरून्यल में नदी या मीठा—सा झरना है।।

माँ,माँ लोरी है जीत है प्यारी सी थाप है।माँ,माँ पूजा की थाली है, मंत्रो का जाप है।। माँ,माँ आँखों का सिसकता हुआ किनारा है।माँ,माँ जालों पर पूर्णी है ममता की घारा है।।

माँ,माँ झुलसते दिलों में कोयल की बोली है।माँ,माँ मेहन्दी है, क्मक्म है, सिंदुर है, रोली है।। माँ,माँ कलम है, दवात है, स्याही है।माँ,माँ परमातमा की स्वयं जवाही है।।

र्मां,मां त्याग है, तपस्या है, सेवा है।मां,मां फूंक से ठण्डा किया हुआ कलेवा है।। मां,मां अनुष्ठाान हैए साधना है, जीवन का हवन है।मां,मां जिदंगी के मोहल्ले में आतमा का मवन है।।

माँ,माँ चुड़ी वाले हायों के मजबुत कंघो का नाम है।माँ,माँ काशी है, कल्ब्य है और चारो धाम है।। माँ,माँ चिंता है, याद है, हिचकी है।माँ,माँ बच्चे की चोट पर सिसकी है।।

माँ,माँ चुल्हा-धुँआ-रोटी और हायों का छाला है।माँ,माँ जिदंगी की कड़वाहट में अमृत का प्याला है।। माँ,माँ पृष्वी है, जगत है, घुरी है।माँ विला इस सुष्टि की कल्पला अधुरी है।।

तो भाँ की कथा ये अलावि है। ये अध्याय नहीं है......भौर माँ का जीवन में कोई पर्याय नहीं है।

तों माँ का महत्व दुनिया में कम हो नहीं सकता। और माँ जैसा दुनिया में कुछ हो नहीं सकता।। तो मैं कला की ये पीक्तयाँ माँ के नाम करता हूँ। और दुनिया की सभी माताओं को प्रणाम करता हूँ।

जगदीश प्रसाद गुर्जर, द्वितीय वर्ष, स्वना एवं अभियात्रिकी

जिंदगानी अभी बाकी है

जरूमी इन पांचों का सफर अभी बाकी है। भीतर से जो हैं वो तो खबर अभी बाकी है। काट दिये पेड़ किन्ही बेरहम हाथों ने। प्यार का एक मंजर मगर अभी बाकी है। दुनिया की बातों में है चुमन की मिलावट माँ की दुलाग्ती सी नजर अभी बाकी है। इक करामकरा की जुबा जिदंगानी बन गई कुछ कट गई रोष की गुजर अभी बाकी है। उनके हाथों का खंजर कुछ कर नहीं पाया क्योंकि खुदा की रहमतों का असर अभी बाकी है।

नितिन रामां, बी.टेक., प्रथम वर्ष, इलैक्ट्रिकल व संचार अभियांत्रिकी

संजय सेनी, वी,टेक. द्वितीय वर्ष, शाख्या – यात्रिकी अभियात्रिकी