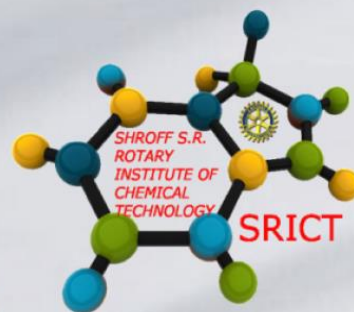


KATHAN 19

 **UPL**



January 2017

KATHAN – EDITORIAL BOARD

SHRIKANT J. WAGH

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Especially thankful for the enthusiastic and dedicated efforts of:

Vikas Thakur

Parth Prajapati

Mechanical Engineering

Chemical Engineering

8th Semester

4th Semester

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EDITORIAL BOARD MESSAGE

Very few have become able to fully realize the treasure trove of Sympathy, Kindness, and Generosity lying in the soul of a child. The effort of every educator is to unveil the treasure and SRICT sets an excellent example where everyone strives indefatigably for this. This institution has been nurturing budding minds of the town and nearby for the past 6 years with the belief that-“The heart of education is the education of the heart.”

The publication of this edition of Kathan knocks at the entrance of the year 2017 and is considered as yet another milestone in the progress and development of the college. Like earlier issues, this edition is going to present a flurry of opportunities before many people who will come to know that as an institution, we are destined to the bright future. It oozes deep pleasure and contentment out of me to ensure about the great stride gained by SRICT in the short period of its existence. We are creating future full of optimism and enthusiasm, a future where every endeavor will stand a landmark.

To all readers, parents, pupils, industry friends, and even stake holders, a little more patience and sobriety will help to see us through. Remember, “You never get the chicks by breaking the eggs; they hatch.” Where there is a life there is hope. We are pleased to present you the 19th issue or in little modified way the Uttarayan issue of the college magazine.

Enjoy every moment of life because in life there are no rewinds, only flashbacks. For you, we have worked hard to fetch an exhilarating flashbacks of events and achievements during the final quarter of the year 2016; a best academic way to bid good bye the year 2016. We have for you from the students and staff a wide range of puzzles, technical, literary articles, drawings and sketches, some informative and inspirational articles as well.

Thanks to all readers and enjoy reading to explore the unknown info....!!!

Our special thanks goes to Mr. **VELMURUGAN S** for sharing his views with us.

Happy Reading...

GREETINGS FROM SRICT:



It's New Year 2017 and the prime time to refresh the Lexicon of your life. Remove words like jealousy, hate, revenge, greed from the dictionary and put words like love, care, compassion, honesty and satisfaction in their places.

A fresh new year with lots of possibilities is once again bestowing upon us. It is the time to be thankful for the blessings of the past year and to take stock of all our achievements. At the same time, New Year 2017 is a brand new year to start anew, to start strong, and yet another chance to do something worthwhile that we aspire to do this year.

The amazing thing with chances is how we get them every year. So, set positive goals and resolutions. Display these goals where you can have a glance in every hour of the New Year and set positive direction be excited for what you can achieve in 2017.

Meanwhile, enjoy the moments of life, the loud and boisterous family dinners together and the quiet intimate meal with your loved ones.

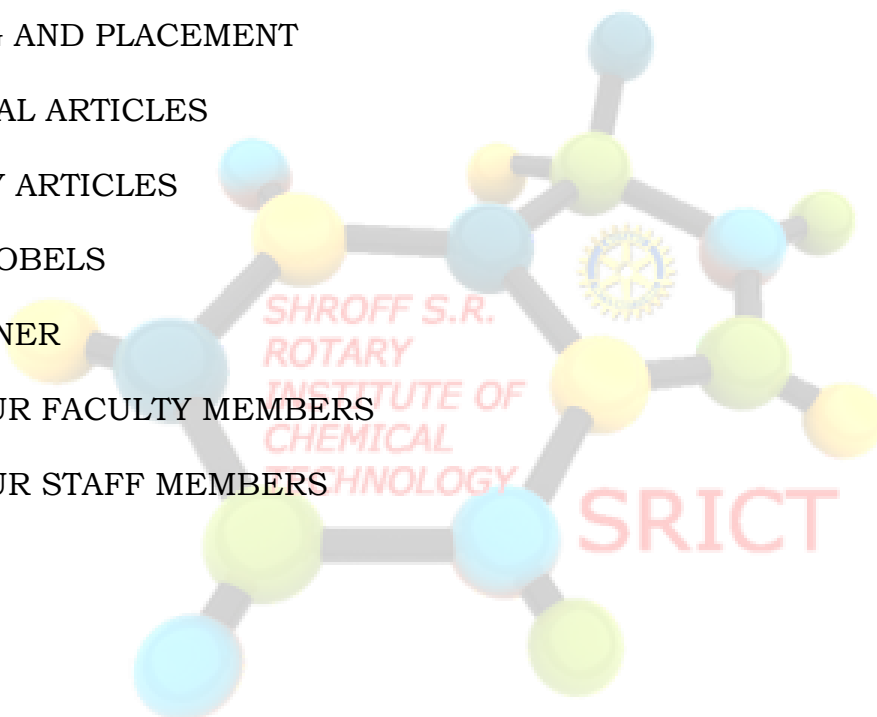
Don't Think about Yesterday,
Rather think about Tomorrow
because Tomorrow is a chance
To rectify the Mistakes of Yesterday.

Let us remember a Quote of Mr. Ratan Tata:

“If you want to go fast, walk alone but if you want to go far, walk together”.

We, the SRICtians with an affectionate sense of togetherness wishes all our readers a very happy and prosperous new year 2017 ahead.

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A MESSAGE FROM AN INDUSTRY PERSON: संदेश



VELMURUGAN S (VELU) PLANT DIRECTOR ABBOTT HEALTHCARE

VELMURUGAN S (Velu) is the Plant Director, Abbott Nutrition Supply Chain, Jhagadia Site, India.

Velu joined Abbott Nutrition Supply Chain in Dec 2013 as Plant Head, Jhagadia Site, India. Prior to joining ANSC, Velu worked as Plant Superintendent in Cargill Foods India Ltd, Kandla, Kutch, India. Velu started his professional career from 1995 and worked through various industries like Nerolac Paints Ltd, Hindustan Unilever Ltd, etc.

Abbott Nutrition Supply chain (ANSC) is part of Abbott Healthcare Pvt Ltd. ANSC, a state of art facility created in southern part of Gujarat commenced its commercial production from June -2014. The site is manufacturing products like PediaSure, Simmom, Ensure and Similac. The site

provides employment opportunities to around 550 direct and indirect employees.

Velu hails from Madurai, southern part of India, is married and having 2 kids. He holds a bachelor's degree in Mechanical Engineering and an MBA in Operations Management. He has around 21 years of Plant operations and Supply Chain experience.

Velu loves listening to music, networking, traveling, and coaching, mentoring & building teams.

Message of Mr. Velmurugan S

We are today at a very exciting phase of economy growth in India becoming 6th largest economy in the world with the growth forecast of 7.6%. Chemical industry has numerous forward and backward linkages, it is called the backbone of the industrial and agricultural development of the country and provides building blocks for many downstream industries. Report indicates that India's chemical industry to touch \$214 billion by 2019. The Chemical Industry of India ranks 6th in world and 3rd in Asia after Japan and China. The chemical industry also challenged with critical issues like, availability of key feedstock, infrastructure status, scale of operations, and access to technology, energy security and ease of doing business.

Most of the industries in India are in the journey of “Zero Defect & Zero Effect” approach. To bring more focus on Sustainable Business model in India, SEBI has mandated Top 100 Public Sector Undertaking units in India, for submitting Sustainability report every year as per National Voluntary Guidelines on Social, Environmental and Economic Responsibilities of Business. Looking at the growth opportunities as well as global challenges, Chemical Industry also shall look forward “Compliance & Beyond” strategy, to assure positive impact to the triple bottom approach.

So, the industry is in need of experts to overcome these challenges through innovative and sustainable solutions. My message to students of SRICT is to spend time in strengthening the fundamental knowledge of subjects and to understand HOW. It is inevitable to look for innovative technology and solutions, but with sustainable solutions to ensure that our natural resources are in-tack.

Am impressed with the SRICT's aspiration of becoming best Chemical Institute in India by 2020 and we as industry would like to participate and support the journey towards the same.

Wishing you a Happy and Prosperous New Year.

SRICT NEWS...

श्रुति एवं प्रवृत्ति।

“RAKTDAAAN-BLOOD DONATION AT SRICT”

[DEEPIKA SHAH – COORDINATOR
RAKTA KUNDLI – 9]

The institute had organized a mega camp of Blood Donation on 26th November 2016.

The Committee of following members was constituted to carry out the camp activities:

1. Mrs. Deepika Shah (Coordinator)
2. Mr. Pintu Prasad (Member)
3. Mr. Pankaj Patel (Member)

And 10 student volunteers (Rotaract club of SRICT) were given responsibilities to fulfill the requirement of the camp as well smooth functioning of the whole event.



Blood Donation Camp:

The Institute has decided to make an awareness drive on Blood Donation. Hence, a camp of Blood Donation was held on 26th November, 2016 for 9th consecutive time named as “**Rakta Kundali**”

Following of the guests were present:

On invitation of the Institute, the following dignitaries were present in the camp to appreciate the participants.

1. Mrs. Meera Panjwani, Dist. Secretary, Rotary club of Ankleshwar
2. Mr. Angiras Shukla, Secretary-ARES
3. Mr. Dharmesh Patel, President-RECA Green
4. Mr. Krunal Suthar – IPP-RECA Green
5. Dr. Snehal Lokhandwala-PP-RECA Green
6. Dr. J. J. Khilwani – Indian Red Cross, Bharuch

The Chief guests of the function Mrs. Meera Panjwani gave their valuable suggestions to the participants and also appreciated the

responsibilities carried out by the students for the healthy society.

Participation:

Total **63 units of blood** were given by the 1st year Students, faculty & staff members.



Sponsored & Supported by:

The entire event was jointly sponsored by Rotary Club of Ankleshwar, Rotary E-club of Ankleshwar Green, Rotaract Club of SRICT, Ankleshwar. The Indian Red Cross Society, Bharuch carried out the entire camp.

Conclusion:

Shroff S R Rotary Institute of Chemical Technology, Vataria had organized a Blood Donation Camp named “Rakta Kundali 9”. The Indian Red Cross Society carried out the entire camp. A team of SRICT led & coordinated by Dr. Deepika Shah had organized the event in such a graceful way.

They appreciated & motivated each of the students & made the event grand success.



“SCHOOL VISITS AT SRICT”

[DEEPIKA SHAH – COORDINATOR, SCHOOL VISIT.]

Since last four years, we are arranging school visits at our Institute. In continuation of the same during current Academic year 2016-17, the following schools had visited our college.



Sr. No.	Name of School	Date	No. of the students
1.	Amity school, Bharuch	26 Nov16	50
2.	Narayan Vidhya Vihar, Bharuch	28 Nov16	120
3.	Swaminarayan Gurukul, Ankleshwar	1 Dec 16	130
4	Swaminarayan Goodwill, Bharuch	02 Dec 16	65
5	Galaxy group of science in falahi school, kim	2 Dec 16	40

6	SVEM Guj medium, Ankleshwar	7 Dec16	100
7	National School, Ankleshwar	8 Dec 16	60
8	Shravan school ,Bharuch	9 Dec 16	63
9	Narayan vidhyalaya, Bharuch	10 Dec 16	140
10	SVEM Eng medium, Ankleshwar	10 Dec 16	60
11	Gattu Vidhyalaya, Ankleshwar	17 Dec 16	90

The students of the school were informed about the facilities of the college along with various career options. The students showed their keen interest about their future. The students were very enthusiastic and overall visit was meaningful.



CHEMICAL ENGINEERING DEPARTMENT

Vision:

To achieve excellence in chemical Engineering and allied fields by providing excellent teaching learning experience enabling students to become competent professionals to tackle global issues.

Mission:

1. To provide excellent technical education to students with basics of chemical engineering.
2. To provide theoretical and practical education so that students vigorously apply knowledge in solving chemical engineering problems for sustained development.
3. To inculcate professional ethics among students by exposing them to state of the art technologies in the field.
4. To inspire students for lifelong learning and to develop leadership qualities in their career.

Programme Objectives (PEOs):

1. To impart the fundamentals of chemical engineering and enable them to have a successful career in industries of wide range.
2. To deliver quality technical education to develop sustainable technology for addressing global issues.

Educational

3. To prepare scholars who are able to solve highly complex chemical engineering problems for the future demands.
4. To provide practical aspects of chemical engineering to students by ways of industrial visits, expert lectures and increased industry-institute interaction thereby making students industry ready.
5. To prepare graduates who can effectively communicate, demonstrate leadership qualities with creative thinking and professional ethics.

Program Outcomes (POs):

Students will be able to

- PO1: apply the concepts of mathematics and science to chemical engineering problems.
- PO2: solve practical problems by utilizing fundamental concepts of chemical engineering like stoichiometry, unit operations, thermodynamics, process control and chemical reaction engineering.
- PO3: analyze real life technical problems related to chemical engineering.
- PO4: offer solutions to technical problems and design processes to take care of environmental, societal and cultural needs.
- PO5: apply research methodologies such as planning and carrying out experiments, generate, analyze and interpret data and draw a conclusion.
- PO6: develop model and simulate chemical engineering problems using appropriate numerical techniques and modern IT tools along with their scope and limitations.

PO7: apply logical thinking, contextual knowledge to assess health, safety, legal issues and offer relevant solutions.

PO8: assess environmental impact of engineering and provide professional solution to a given real life problem along with remedial measures to make process/ solution sustainable.

PO9: work efficiently as an individual or as a team member in diverse disciplines.

PO10: interact effectively with engineering community and society at large for solving complex engineering problems by way of technical presentations and preparing project reports.

PO11: apply CPM/PERT techniques in their project work as an individual and as a team member in multidisciplinary environment.

PO12: engage independently in lifelong learning process in constantly evolving chemical engineering knowledge and practices.

4. The ability to work with ethical responsibility considering the norms of the engineering practices by undergoing continuous learning through peer learning initiatives, 5S, pair learning, design engineering, open ended project and active learning assignment.

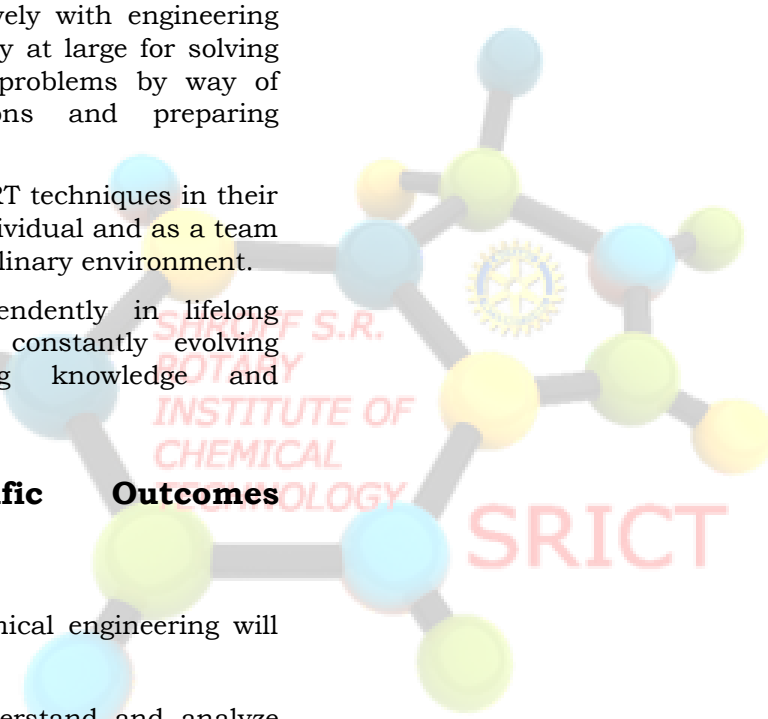
Program Specific Outcomes (PSOs):

The graduate of Chemical engineering will demonstrate:





1. The ability to understand and analyze chemical engineering concept through unit operations, chemical reaction engineering, and modelling and simulation.

2. Practical aspects of chemical engineering equipment's and process.

3. The ability to apply core chemical engineering knowledge for providing better services while practicing engineering in process industries.



			
Dr. Shrikant Wagh	Dr. Sanjiv Dharwadkar	Dr. Alok Gautam	Dr. Shina Gautam
Principal	Professor on retainership	Associate Professor	Associate Professor
Ph.D.	Ph.D.(Tech.)in Chemical engineering,UDCT, Bombay University,1988	Ph.D. University of Newcastle, Australia, 2013	Ph.D. University of Newcastle, Australia, 2013
Exp. 27 years	Exp. 31 years	Exp. 10 y 5 m	Exp. 5 y 9 m
shrikant.wagh@sriect.in	sanjiv.dharwadkar@sriect.in	alok.gautam@sriect.in	shina.gautam@sriect.in
			
Mr.Yashawant Bhalerao	Mr. Hemantkumar Balsora	Mr. Krunal Suthar	Ms. Nirali Tharwala
Assistant Professor	Assistant Professor	Assistant Professor	Assistant Professor
M.E.	M.Tech	M.E.	M.E.
Exp. 13y 10 m	Exp. 4 y 9 m	Exp. 3 y 9 m	Exp. 3 y 4 m

yashwant.bhalerao@sri ct.in	hemant.balsora@sri ct.in	krunal.suthar@sric t.in	nirali.tharwala@sric t.in
			
Mr. Chirag Mevada	Mr. Akshaysinh Magodara	Mr. Chintan Modi	Mr. Sagar Kapadiya
Assistant Professor	Assistant Professor	Assistant Professor	Assistant Professor
M.E.	M.E.	M.E.	M.Tech.
Exp. 3 y 5 m	Exp. 3 y	Exp. 1y 8 m	Exp. 1 year 1 month
Chirag.mevada@sri ct.in	akshaysinh.magoda ra@sri ct.in	chintan.modi@sri ct.in	sagar.kapadiya@sri ct.in

	
Ms. Pritee Parmar	Mr. Endrick Contractor
Assistant Professor	Assistant Professor
M.E	M.E
Exp. 9 months (Industry)	Exp. 1 year
Pritee.parmar@sri ct.in	Endrick.contractor@ sri ct.in

ACTIVITIES DEPARTMENT ELECTRICAL ENGINEERING

[DEPARTMENT OF ELECTRICAL
ENGINEERING]

A One-Day Workshop on “Testing of High Voltage Equipments in Industry” for Diploma Engineering Students

Department of Electrical Engineering of Shroff S R Rotary Institute of Chemical Technology (SRICT), Ankleshwar had organized a one day workshop on “Testing of High Voltage Equipments in Industry” on 24th September 2016. This workshop was organized for Diploma Students of Valia Polytechnic College, Valia to give them a hands-on practice about the theory and working of High Voltage Equipment's.

The inaugural function was attended by Mr. Praful Chudasama, Head, Department of Electrical Engineering, Ms. Richa Dubey, Assistant Professor and faculties of Department of Electrical Engineering. The main purpose of this workshop was to make students aware of High Voltage and train them so that they can be ready for industrial exposure.

Mr. Praful Chudasama and Ms. Richa Dubey gave good exposure to students about High Voltage with practical sessions. The event was successfully well organized and coordinated by Department of Electrical Engineering of SRICT with the full support of SRICT management.



Refresher Course on Electrical Safety & Audit in Industry

The Department of Electrical Engineering had organized a Refresher course on “Electrical Safety & Audit in Industry” on 8th October, 2016. The program was inaugurated by Chief Guest **Mr. Jitendra Jain, PE- Gujarat Guardian Ltd., Mr. Ashok Panjwani**, Vice Chairman, ARES, **Dr. Shrikant .J. Wagh**, Principal, SRICT, **Mr. Praful P Chudasama**, HOD, DEE and Speakers **Mr. N.N. Parekh & Mr. Sanat Pandya**. More than **60 delegates** from various industries & academicians participated in the course organized. The speakers of the session were Mr. N.N Parekh, Electrical Safety Consultant, Vadodara and Mr. Sanat Pandya, Electrical Safety Consultant, Vadodara.

The sessions were based on Fundamental of Industrial Electrical Safety, CEA Regulations for Electrical Safety, Case studies of Accidents due to power Electricity and Electrical Safety Audit and its Methodology.

The course received a lot of positive response from the speakers & delegates. DEE has been motivated to organize such programs in future too.

The Chief Guest of the valedictory function was Mr. **Dharmesh Kansara**, General Manager - HR & Admin, Gujarat Borosil Ltd., He spoke about the importance of Electrical Safety in process industries. He also encouraged to organize such Programs in future also. The vote of thanks was delivered by Mr. Praful P. Chudasama, HOD, Department of Electrical Engineering, and SRICT.

The refresher Course was coordinated by Mr. Praful P Chudasama, Head, Department of Electrical Engineering, Faculties & Staff members of DEE.

meeting, student's attendance, facilities provided to students etc.

Mr. Praful P Chudasama, HOD, Dept. of EE, presented the department activities towards student's improvement, student's attendance criteria, CES result analysis of current semester, Bonus marks Criteria, Scholarship Criteria, and Eligibility Criteria for Training & Placement activity, EPC etc, Mrs. G. Pradeepa & Mr. Praful Chudasama interacted with parents about different policies, contribution and planning of SRICT towards student's progress.

Parents were requested to motivate their children for more hard work in academic progress.

Parent's feedback was excellent about SRICT and they appreciated the campus discipline and motivational activities.



Parents Meeting- Sampark Abhiyan Report

Parents meeting for 3rd sem EE students was arranged at SRICT on 19th November, 2016. Dr. Shrikant J Wagh, Principal – SRICT, welcomed parents and he elaborated the importance of parents



INAUGURATION of IE (I) SRICT Students Chapter (Electrical)

The Department of Electrical Engineering of Shroff S R Rotary Institute of Chemical Technology inaugurated IEI Students Chapter (Electrical) on 15th December 2016. The program was inaugurated by Chief Guest Mr. A B. Chaudhary, Deputy Chief Electrical Inspector, Vadodara. Guest of Honor Mr. Mukund Master, Hon. Secretary, IEI, SGLC, Surat, Mr. Bhaskar Bhatt Hon. Joint Secretary, IEI, SGLC, Surat, Mr. H S Shah, Assistant Electrical Inspector, Bharuch, Mr. D. A. Patel, Member, IEI, SGLC, Surat, Dr. Shrikant J. Wagh, Principal, SRICT, Mr. Praful P. Chudasama, HOD, DEE and Speaker Er. S M Takalkar, Director, TPEC, Vadodara. As 14th December, 2016 was "National Energy Conservation Day", the overall theme of the whole program was celebrated on Conservation of Energy and its awareness.

An expert talk was delivered by Mr. S M Takalkar on the topic "Energy Conservation and its benefits to Industry". He shared his knowledge and expertise and enlightened everyone present in the ceremony.

Mr. Mukund Master, Hon. Secretary, IEI, SGLC, Surat briefed about the activities that are carried out by IEI chapter and also he invited the members of IEI to visit IEI center Surat.

The program was successfully organized and coordinated by Electrical Engineering Department of SRICT with the full support of Ankleshwar Rotary Education Society (ARES) Management.



Elected Executive Committee Members (2016-17)

Sr . No.	Name of Member	IE(I) Members hip No	Design ation	Class
1	Mr. Saumitra Wagh	393001/S RCT/EL/044	Conven er	4 th Year
2	Mr. Chintan Jilka	393001/S RCT/EL/041	Membe r	4 th Year
3	Mr. M. Hussein Kapadia	393001/S RCT/EL/023	Membe r	3 rd Year
4	Ms. Shreya Shah	393001/S RCT/EL/034	Membe r	3 rd Year
5	Mr. Ashutos h Singh	393001/S RCT/EL/012	Membe r	2 nd Year
6	Mr. Harshil Patel	393001/S RCT/EL/007	Membe r	2 nd Year

7	Mr. Meghrajsinh Parmar	393001/S RCT/EL/089	Member	1 st Year
8	Ms. Palak Pawar	393001/S RCT/EL/090	Member	1 st Year
Sr. No.	Name of Advisor & Members	IE(I) Membership No	Designation	Class
1	Mr. Praful P Chudasma	M-1560837	Advisor	HOD, DEE
2	Mr. Manish Mishra	AM 1684119	Co Advisor	Faculty, DEE
3	Mr. Hiren Jariwala	AM 1684097	Advisor Member	Faculty, DEE
4	Mr. Sourav Choubey	AM 1684100	Advisor Member	Faculty, DEE

Sr. No.	Name of Ex-officio, SGLC	IE(I) Membership No	Designation
1	Er. P. H. Tandel	F-013099-7	Chairman, SGLC, Surat
2	Er. Mukund B. Master	M-131148-9	Secretary, SGLC, Surat

(This list was made with reference to the IE (I) Students' Chapter meeting held on 14/12/16.)

REPORT ON REFRESHER COURSE - ME

[GUNJAN KUMAR - COORDINATOR (APME)]

A refresher course on “Modern Power Boiler: Operation, Maintenance and Energy Conservation Opportunities”

The Department of Mechanical Engineering has organized a refresher course on Modern Power Boiler: Operation, Maintenance and Energy Conservation Opportunities at Shroff S. R. Rotary Institute of Chemical Technology on Saturday, 17th December 2016.” This course covered the basic concepts of Power Boiler as well as operation and maintenance aspects of Boiler. Energy conservation techniques and opportunities were also discussed. Total no. of participants was 39.



The Inaugural function was graced by Chief Guest Mr.Velmurugan, Plant Director, Abbott Healthcare Pvt. Ltd., Dr. Shrikant J Wagh, Principal SRICT and Mr.Hiren R Mahida Head of Mechanical Engineering

Department. Mr. Velmurugan appreciated the efforts taken by SRICT to interact with industries by mean of such course. Dr. Wagh delivered a welcome speech and Mr. Hiren R Mahida briefed the course. The course was well coordinated by Mr. Gunjan Kumar accompanied with Mr. Girish Bramhakshatriya, Mr. Satish Verma, Mr. Shivang Ahir, Mr. Chetan Patel, Mr. Dinesh Patel, Mr. Ankit Solanki, Mr. Samik Bhatt, Mr. Maitreya Pandya, Mr. Ankur Solanki, Mr. Tarik Shaikh, Mr. Jatin Parmar, Mr. Rudraduttsinh Parmar, Mr. Dipen Rana, Mr. Devang Patel, Mr. Vishwadip Ghariya and all supporting staff of Mechanical engineering Department.



First session comprised with basic of Modern Power Boiler delivered by Mr. Gunjan Kumar, Assistant Professor, MED, SRICT. Second and third session on Maintenance and Energy Conservation Opportunities was delivered by Mr. Shekhar Singhi, Senior Manager, ISGEC Heavy Engineering Limited. Final session on Boiler Operation was delivered by Mr. Gunjan Kumar.



All the sessions were interactive and views sharing. The participants were from different industries and institutes like UPL, Lanxess India Private Limited, Jhagadia, TEGA Industries (SEZ) Ltd., Dahej, Ganesh Sugar, Vataria, BEIL, ETL, PI Industries, A Y Dadabhai Technical Institute, Kosamba, K J Polytechnic Bharuch, SVMIT Bharuch etc.

At the end of Program, Valedictory Function was arranged in presence of Mechanical Department Mentor Dr. Sanjiv Dharwadkar, Dr. Shrikant J Wagh, Principal SRICT and Mr. Hiren R Mahida, Head of Mechanical Engineering Department. Vote of thanks was given by Dr. Sanjiv Dharwadkar. Speakers were felicitated by mementos. Attendees shared their experience and views. This Course really helped them to enhance knowledge in their working area. Feedback of the participants was quite positive.



Kumar (Class Co-ordinator) interacted with parents about MED Faculties, Laboratory Facilities available in MED, CES Exam, Attendance Criteria, GTU Results of 2nd Sem. MED, CES-I & II Results of 3rd Sem. MED, IV/EL of 3rd Semester, 5s, EPC, VLNC and NBA. Parents' were requested to motivate their wards to enhance their academic performance. Dr. Sanjiv Dharwadkar (Department Mentor) and Mr. Hiren Mahida (HOD) also interacted with Parents' during session. Feedback given by Parents' was found good about SRICT and MED.



2ND YEAR MED (PARENTS-TEACHER MEETING)

Parents-Teacher meeting, "Sampark Abhiyan" for the 2nd year (3rd Semester) Mechanical Engineering Students was arranged by Department of Mechanical Engineering on 12th November, 2016 at SRICT Seminar Hall No. 03. Mr. Gunjan

REPORT ON OPEN ENDEN PROJECT

[NIRALI THARWALA, ASSISTANT
PROFESSOR, CE DEPARTMENT]

An open-ended project is done by the students to develop their own experiments, instead of just following the already set guidelines from a lab manual or elsewhere. The students here have to devise their own strategies and back them with explanations, theory and logical justification.

Students of 3rd year chemical engineering has prepared working model of trommel and grizzly. These equipments are basically used for mechanical separation of solid based on their size.



HOW EPC COURSE IS HELPFUL TO THE STUDENTS

[KRISHNA MANI, 6TH SEM EST
STUDENT]

English is the internationally acclaimed and spoken language of the day. Naturally, it becomes the language for communication. So it is very essential to be fluent in English. First we need to learn the language and then we need to gain fluency in the language.

English Proficiency Course has been employed to help students to acquire fluency in English thereby increasing their confidence in communication. By English Proficiency Course, one can write

with greater accuracy, speak fluently and effortlessly express their views and ideas. It reduces the barrier one facing in communication.

English is the working language across the globe. People are using this language on the daily life. It is also the language spoken in the corporate world. English is the dominant business language and it has become almost a necessity for people to speak good English if they are to enter a global workforce. Research from all over the world proves that cross-border business communication is most often conducted in English. Its importance in the global market place therefore cannot be understated, learning English can radically change your life.

Thus, EPC course is very much helpful for the students to get rid of the barriers coming during communication.

PSD (PROFESSIONAL SKILL DEVELOPMENT)

[AMIT GALPHADE, ASSISTANT PROFESSOR, ME DEPARTMENT]

In today's highly competitive world, time has become the most precious. For every product, there are always options available to the customer. In such scenario, companies are looking for the people who can get absorbed in the company without much problem and start performing at their potential at earliest.

Students are at the same time looking for getting better jobs which allow them to grow as a professional person as well as to grow in their careers. For this, they also need to have skills to survive and excel in the industry.

If one observes closely, the above-mentioned requirements are the two faces of same coins. While companies need fast learners, students also need good companies to work for. While technical skill is not an issue for today's engineer, the professional skills are and they are the liaison between the companies and the students.

The Professional Skills Development course is designed to address this need of both the companies and the students. The course will be delivered by the representatives from the Corporate and Industry Sector which will help in bringing both the stakeholders together and thus help in bridging the gap.

Also, the course is designed by taking inputs from the companies by keeping in mind the students. The direct input from the companies ensures that the content is addressing their needs. At the same time, it also helps in covering the gap that is present between the skill set of students and the companies' expectations.

The students get the benefit of knowing what is missing in their resume. At the same time, they get the opportunity to interact directly with the top-level managers. This will help them in looking from manager's perspective. At the same time, they will be able to gain the competitive edge over the other students when they will be appearing for the interviews.

In nutshell, Professional Skills Development aims at bringing together companies as well as students and help in bridging the gap between expectations and reality. This will help companies to have industry ready fresh engineers and engineers will be ready with the necessary skills to hit directly the road to enhance their careers.

NATIONAL SAFETY CONCLAVE-2016 ON QUALITY CONTROL AT VNSGU (SURAT) ORGANIZED BY QCFI

On 10th December 2016, students from 1st semester, along with Ms. Vinitha Vakkayil (MSH), Mr. Ankur Gheewala (EE) & Praful Mokadam (ME) went to Veer Narmad South Gujarat University, Surat. We reached there at 8:30am. The conclave was arranged in the convention hall of VNSGU and was based on the theme '**Better to Be Safe than Be Sorry**'. It was organised by Quality control forum of India (QCFI) Surat. The agenda of the conclave included People's participation for safety through quality approach, Safety Management, Hazards and mismanagement, Quality concept in material handling, Effect of work we are carrying unsafely.

The Chief guests present in the conclave were:

Mr. Raju Modi –Director QCFI-Head
Quarter

Mr. Vijay Assar-Chairman-QCFI-
Ankleshwar Chapter

Mr. Praful Vayeda-Chairman QCFI-
Surat Sub Chapter

The main aim and objective of the conclave was:

- Generate mass awareness on fire safety and occupational health in all sectors.
- Improve safety standards, formulate and follow safety guidelines.

- Reduce accidents aiming at zero accidents.
- Understand modern but intricate processes with regard to issues and concerns of safety.
- Prioritize focus on unorganized sector.

We had detailed lectures on the topics:

- Chemical Hazard
- The concept of risk
- Techniques to be safe
- Risk Analysis
- Details of the Japanese concept- Kaizen



EXPERT LECTURES

Environmental Science & Technology

- “How to face Personal Interviews” for the 7th semester EST Students on 20th August 2016 by Mr. Yogesh Dave, Assistant Manager, SPC life science Ltd.
- “Sustainable Industrial Water Management” for the 7th semester EST Students on 23rd August 2016 by Dr. Mritunjai Chaubey, VP ENV UPL.
- “How to draft Patents” for the 7th semester EST Students on 27th August 2016 by Dr. AB OZA, Asst. Manager, GNFC.
- “Disaster Management” for the 7th semester EST Students on 09th September 2016 by Mr. Kannan R, Head CHSE, UPL.
- “How to face Personal Interviews” for the 5th semester EST Students on 20th August 2016 by Mr. Yogesh Dave, Assistant Manager, SPC life science Ltd.
- “Disaster Management” for the 5th semester EST Students on 09th September 2016 by Mr. Kannan R, Head CHSE, UPL.
- “Enviro Landfilling” for the 5th semester EST Students on 10th September 2016 by Mr. Fakhari Kanpurwala, Environmental Engineer, GICEA, Ahmedabad.
- “How to make Project Report” for the 3rd semester EST Students on 08th November 2016 by Mr. Manubhai

Patel, Retd. Dairy Technologist, Anand.

- “Basics of water pollution” for the 3rd semester EST Students on 26th November 2016 by Mr. Mitul Patel.
- “Biomagnification and Bioaccumulation” for the 3rd semester EST Students on 25th November 2016 by Dr. PNP, VP UPL.
- “Phase Transformation from College to Industry” for the 3rd semester EST Students on 25th November 2016 by Ms. Janki Mehta, Env Engg, BEIL.
- “Environmental Microbiology” for the 3rd semester EST Students on 09th November 2016 by Dr. Maulin Shah, Asst. Manager, ETL.

CHEMICAL ENGINEERING

- “Insight of Gas- Liquid Reactions” for the 7th semester CE Student on 11th July 2016 by Dr. Nitin Bhate, Associate Professor, Chemical Engineering Department, Maharaja Sayajirao University of Baroda.
- “Pumps”, for the 3rd semester CE Student on 13th July 2016 by Mr. P. M. Kapadia, Manager, Technical Service Department, GNFC Bharuch.
- “Understanding of Laboratory analysis for material balance”, for the 5th semester CE Student on 13th July 2016 by Mr. I. G. Chaudhari, Chief Manager (R&D) GNFC Bharuch.
- “Vessel and Heat exchanger design”, for the 7th semester CE Student on 22nd July 2016 by Mr. S. B. Umarji

and Mr. G. S. Umarji, Director, New Multifab Engineers Pvt. Ltd. Mumbai.

- “Kargil Vijay Day Celebration”, for the 7th semester student on 26th July 2016 by Mr. K. P. Sharma, Ex-IAF and Mr. S. P. Shastri, DSP.
- “Motivation towards Chemical Engineering”, for the 7th semester CE Student on 27th July 2016 by Mr. S. K. Jindal, Unit Head, UPL-5, Jhaghadia, Bharuch.
- “Rule of Thumb for Chemical Engineers”, for the 7th semester CE Student on 5th August 2016 by Mr. Kirat Nikhil Raval, Shift Manager, Covestro India Private Ltd. Ankleshwar.
- “Introduction to Heat Exchanger”, for the 5th semester CE student on 21st September 2016 by Mr. K. P. Shah, Senior Manager, Technical Service, GNFC, Bharuch.
- “Process Safety” for the 5th semester CE student on 22nd September 2016 by Mr. Jagdish J. Modi, Safety Officer, GNFC, Bharuch.
- “Introduction to Chemical Engineering”, for the 3rd semester CE student on 22nd September 2016 by Mr. Saumil N. Shah, Senior Safety Officer, GNFC, Bharuch.
- “Material Balance in Process Calculation without chemical reaction”, for the 3rd semester CE student on 26th September 2016 by Mr. Bharat Trivedi, General Manager (Works), BEIL, Ankleshwar.
- “Material Balance in Process Calculation with chemical reaction”,

for the 3rd semester CE student on 2nd December 2016 by Mr. Bharat Trivedi, General Manager (Works), BEIL, Ankleshwar.

CHEMICAL TECHNOLOGY

- “Basics of Ultra High Molecular weight polyethylene” for the 3rd semester CT Students on 5th October 2016 by Mr. Pinkal Shah, Shree Polymers.
- “Scope of Entrepreneurship” for the 7th semester CT Students on 5th October 2016 by Mr. Pinkal Shah, Shree Polymers.
- “Pigments and Its application in Paint Industry” for the 3rd, 5th & 7th semester CT Students on 10th October 2016 by Dr. Kashyap Desai, Heubach.
- “Role of Current Regulatory Affairs in Pharmaceutical Industries” for the 3rd, 5th & 7th semester CT Students on 20th October 2016 by Dr. Monoj Agarwal, Wockhard.
- “Basics of Polymers” for the 3rd, 5th & 7th semester CT Students on 9th November 2016 by Dr. Harjeet Singh Jaggi.

ELECTRICAL ENGINEERING

- “Passive Components” for the 5th semester and 3rd semester EE Student on 04th October 2016 by

Mr. R. P. Deshpandey, Technial Consultant, Aurangabad.

- “Ultra Capacitor” for the 5th semester EE Student on 05th October 2016 by Mr. R. P. Deshpandey, Technial Consultant, Aurangabad.
- “Characteristics of a Good engineer in an Industrial Environment” for the 3rd semester EE Student on 12th October 2016 by Mr. Jaimin Trivedi, Compliance Coordinator, HR, CLP India Pvt. Ltd., Bharuch)
- “Student awareness on Swachh Bharat Abhiyan” for the 5th semester EE Student on 19th October 2016 by Mr. Narendrasinh Ravor, Gujarat Ecological commission, Gandhinagar

MSH DEPARTMENT

- “Addition, Elimination and substitution reaction in Organic chemistry” for the 1st semester students on 3rd December 2016 by Mr. Shahrukh Asundaria, Assistant Manager, Zydus Healthcare, Unit-2. Ankleshwar.
- “Application and use of engineering plastics in today’s world ” for the 1st semester students on 31st December 2016 by Mr. Pinkal Shah, Owner, Shree Polymer Ltd. GIDC. Ankleshwar.

MECHANICAL ENGINEERING

- “NDT methods” for the 3rd semester ME Student on 29th September 2016 by Mr. A P. Banker, Sr. Mechanical Engineer, Mechanical Engg. Dept, G.N.F.C., Bharuch.
- “Pump Type and its operation” for the 1st semester ME Student on 29th September 2016 by Mr. A P. Banker, Sr. Mechanical Engineer, Mechanical Engg. Dept, G.N.F.C., Bharuch.
- “Steam Boiler ” for the 3rd semester ME Student on 11th November 2016 by Mr. Vaibhav Bansal, Deputy Manager (Power Plant),Grasim Industries Ltd., Kharach, Kosamba.
- “Steam Boiler ” for the 1st semester ME Student on 11th November 2016 by Mr. Vaibhav Bansal, Deputy Manager (Power Plant),Grasim Industries Ltd., Kharach, Kosamba.
- “Klien Construction Method-Kinematics of Machine ” for the 3rd semester ME Student on 08th December 2016 by Mr. Anant J Seth, Assistant Professor Govt. Engg College Bharuch.

INDUSTRY VISITS

CHEMICAL ENGINEERING

- Nivika Chemo Pharma on 7th September, 2016 by 5th semester CE students.
- Solvay Specialities India Private Limited on 22nd September, 2016 by 7th semester CE students.
- KANORIA CEHMICALS, ANKLESHWAR on 27th September, 2016 by 7th semester CE students.
- KLJ Organics Ltd. On 30th September. by 3rd sem CE students.
- Sajjan India, Ankleshwar on 8th October, 2016 by 3rd sem CE students.
- UPL-5, Jhagadia on 15th October, 2016 by 7th CE students.
- Coromandel International Limited, Ankleshwar on 28th October, 2016 by 3rd sem CE students.

CHEMICAL TECHNOLOGY

- NPCIL, Mandavi on 8th July, 2015 by 7th semester ME students.
- Shree Polymers, Ankleshwar on 20th Sept. 2016 by 7th semester CT students.
- Hikal Limited, Panoli on 8th Sept., 2016 by 7th semester CT students.
- Vihita Bio Chem Pvt. Ltd., Ankleshwar on 21th & 7th Sept.

by 7th & 3rd semester CT students.

- Sanofi India Ltd., Ankleshwar on 1st Oct., 2016 by 7th semester CT students.
- Subashri Pigments Pvt. Ltd., Ankleshwar on 3rd Sept. 2016 by 7th semester CT students.
- Lonsen Kiri Chemical Ind. Ltd., Baroda on 6th Oct., 2016 by 7th semester CT students.
- Arham Non Woven Pvt. Ltd., Kosamba on 29th Sept., 2016 by 3rd, 5th & 7th semester CT students.
- Piramal Glass Limited, Kosamba on 29th Sept., 2016 by 3rd, 5th & 7th semester CT students.
- BEIL, Ankleshwar on 16th Aug., 2016 by 5th & 7th semester and on 17th Sept., 2016 by 1st semester CT students.
- Colortex, Dahej on 24th Aug., 2016 by 5th semester CT students.
- Gharda Chemicals Ltd., Panoli on 26th Aug., 2016 by 3rd, 5th & 7th semester CT students.
- Kaneria ceramics, Dahej 26th July, 2016 by 5th semester CT students.
- Eskay Iodine Pvt. Ltd., Jhaghadia on 19th July, 2016 by 3rd semester CT students.
- Raj Yog Pvt. Ltd., Ankleshwar on 1st October, 2016 by 3rd semester CT students.
- ETL, Ankleshwar on 7th Sept., 2016 by 1st semester CT students.
- BEIL, Ankleshwar on 17th Sept., 2016 by 1st semester CT students.

- Analpa Industries, Ankleshwar on 19th Sept., 2016 by 1st semester CT students.

2016 by 3rd semester EE students.

ENVIRONMENTAL SCIENCE & TECHNOLOGY

- Lanxess, Jhagadia, on 26th Sep, 2016 by 7th semester EST students.
- Sajjan India Ltd, Ankleshwar, 30th September, 2016 by 5th semester EST students.
- UPL-5, GIDC Jhagadia, 5th Oct, 2016 by 7th semester EST students.
- Sanofi Pvt Ltd, GIDC Ankleshwar, 22nd Oct, 2016 by 5th semester EST students.
- Lupin Pvt Ltd, GIDC Ankleshwar, 25th Oct, 2016 by 3rd semester EST students.

ELECTRICAL ENGINEERING

- Trimurti transformers, Ankleshwar on 6th October, 2016 by 7th semester EE students.
- SWITCH Electrical Expo, Baroda on 10th October, 2016 by 7th semester EE students.
- SWITCH Electrical Expo, Baroda on 7th October, 2016 by 5th semester EE students.
- Godrej Industries ltd., Valia on 22nd September, 2016 by 3rd semester EE students.
- UPL limited Unit no.3, Ankleshwar on 27th September,

MSH DEPARTMENT

- Analpa industry Ankleshwar on 8th December, 2016 by 1st semester EST and EE students.
- Analpa industry Ankleshwar on 10th December, 2016 by 1st semester CE students.

MECHANICAL ENGINEERING

- Narmada Engineering and Fabricators on 22nd September, 2016 by 7th semester ME students.
- CLP India on 22nd September, 2016 by 5th Semester ME Students.
- Pepsico India Holdings Pvt Ltd. On 28th October, 2016 by 3rd semester ME students.
- Godrej Industries on 11th November, 2016 by 3rd semester ME students.

STUDENTS' ACHIVEMENT

- NCQC 2016: Mr.Parth Gupta & Mr.Chintan Chaarola ,8th Sem ,ME has presented case study on “ 5S practices at Mechanical Workshop ,SRICT” at NCQC 2016,at Raipur,Chhatisgharh during 16-19 Dec.2016 and won PAR EXCELLENCE AWARD . Guided By: Dr.Purvi Naik ,FIVE S co ordinator,SRICT

WE NAYAK TRAINING & PLACEMENT

[DR SNEHAL LOKHANDWALA- HEAD-EST DEPT & INCHARGE T&P CELL]

Placement Record (2012 Admission Batch Student): As on 6th January 2017

Sr no.	Department	Students Placed	Total Students	% Place
1	Chemical Engineering	47	49	95.91
2	Mechanical Engineering	54	59	91.52
3	Environment Science and Technology	23	24	95.83
4	Electrical Engineering	48	51	94.11
5	PT	9	9	100
6	PR	7	8	87.5
7	DP	4	4	100
Total		192	204	94.11

TECHNICAL ARTICLES: प्रयुक्तिलेख

Title

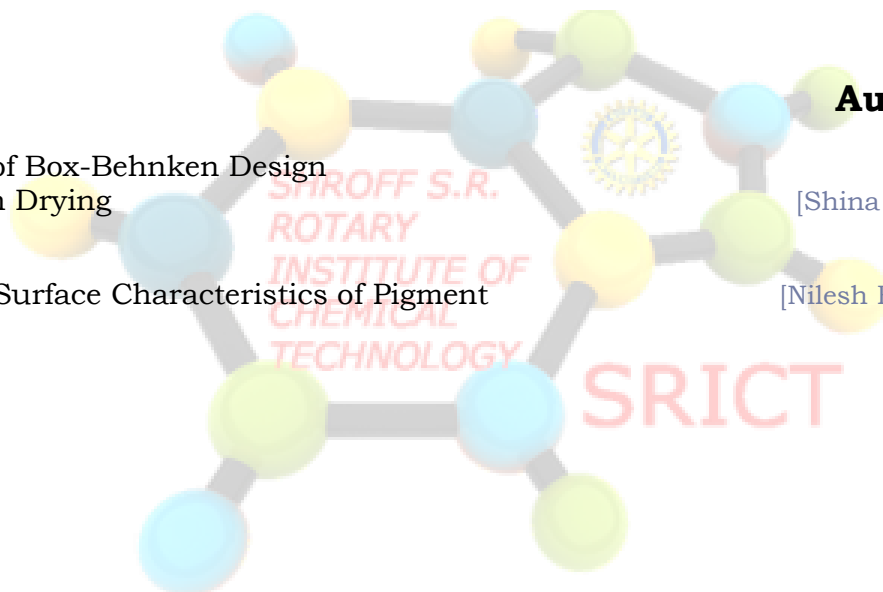
Application of Box-Behnken Design
For Pumpkin Drying

Nature And Surface Characteristics of Pigment

Author

[Shina Gautam, CE]

[Nilesh Badgujar, CT]



APPLICATION OF BOX-BEHNKEN DESIGN FOR PUMPKIN DRYING

[SHINA GAUTAM- ASSOCIATE PROFESSOR, DEPARTMENT OF CHEMICAL ENGINEERING]

Pumpkin is rich in vital antioxidants, and vitamins (vitamin-A, vitamin-C, and vitamin-E,) and are grown around the world at the commercial scale for its flash and seeds. However owing to its high moisture content, pumpkin is susceptible to microbial spoilage. Drying helps to reduce the water activity, thereby, increasing its shelf life. Drying is an energy intensive process and so it is important to find the optimum drying conditions. The objective of the present study is to develop a model for the pumpkin drying using Box-Behnken design method.

Material and methods

Fresh pumpkin was obtained from vegetable market and was cut into small pieces with a sharp knife. Then a piece of pumpkin was suspended in a dryer having provisions to control air velocity and temperature at desired values. The samples were periodically removed from the dryer and weighed to calculate the weight loss. The initial moisture was determined by placing 3 gm of sample in an oven for 3 hours at 105 °C.

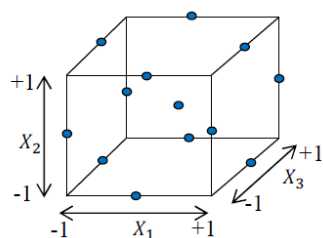


Figure 1 The graphical representation of a three parameters Box-Behnken design.

Design of experiments

The effect of size (X_1), temperature (X_2), and air velocity (X_3) on the drying time was investigated using the Box-Behnken response surface methodology. The parameters studied were coded at three levels; -1 (minimum value), 0 (middle value), and +1 (maximum value) as shown in Figure 1. The response for the Box-Behnken design was taken as the time required for removal of 80% of initial moisture.

A second order model was used to find the response (drying time) for the given conditions. This model can be written as:

$$y = \alpha_0 + \alpha_1 X_1 + \alpha_2 X_2 + \alpha_3 X_3 + \alpha_4 X_1 X_2 + \alpha_5 X_1 X_3 + \alpha_6 X_2 X_3 + \alpha_7 X_1^2 + \alpha_8 X_2^2 + \alpha_9 X_3^2 + \varepsilon_i \quad (1)$$

where y is the response, X_1 , X_2 , and X_3 are the independent parameters α_0 is the constant coefficient, α_1 , α_2 , and α_3 , are the coefficients for linear effect, α_4 , α_5 , and α_6 , are the coefficients for interaction effect, α_7 , α_8 , and α_9 , are the coefficients for quadratic effect, and ε_i is the error.

The value of y for given values of X_1 , X_2 , and X_3 using Eq. (1) can be calculated, if the values of α_1 , α_2 , ..., and α_9 are known. To find the values of unknown coefficients, Box-Behnken design uses the experimental data points of the design matrix [2]. The experimental design matrix along with the coded levels of the three parameters is shown in Table 1. The experimental (y_p) and the predicted (y_p) values of the response (drying time) are also shown.

Results and discussions

The model obtained using Box-Behnken design is written below:

$$y_p = -164.493 + 434.837X_1 - 2.5799X_2 + 18.1338X_3 - 3.65X_1X_2 - 9.5652X_1X_3 - 0.087X_2X_3 - 9.5X_1^2 + 0.0413X_2^2 - 0.137X_3^2$$

(2)

After obtaining the model equation (2), three-dimension surface response plot were generated in MATLAB to investigate the drying behavior of pumpkin (Fig 2- Fig 4).

Table 1. Experimental design matrix and the experimental (y_e) and the predicted (y_p) values of the response. The coded levels are given in brackets. The response for the model was taken as the drying time (min.) for 80% removal of initial moisture.

Size (cm)	Temp (° C)	Vel (m/s)	y_e	y_p
1 (-1)	50(-1)	10.15(0)	8	8
2(+1)	50(-1)	10.15(0)	2	2
1(-1)	70(+1)	10.15(0)	3	3
2(+1)	70(+1)	10.15(0)	9	9
1.5(0)	50(-1)	6.7(-1)	1	1
1.5 (0)	50(-1)	13.6(+1)	1	1
1.5 (0)	70(+1)	6.7(-1)	8	8
1.5 (0)	70(+1)	13.6(+1)	5	4
1(-1)	60(0)	6.7(-1)	5	5
1(-1)	60(0)	13.6(+1)	5	5
2(+1)	60(0)	6.7(-1)	1	1
2(+1)	60(0)	13.6(+1)	1	1
1.5(0)	60(0)	10.15(0)	1	1
1.5(0)	60(0)	10.15(0)	1	1
1.5(0)	60(0)	10.15(0)	1	1

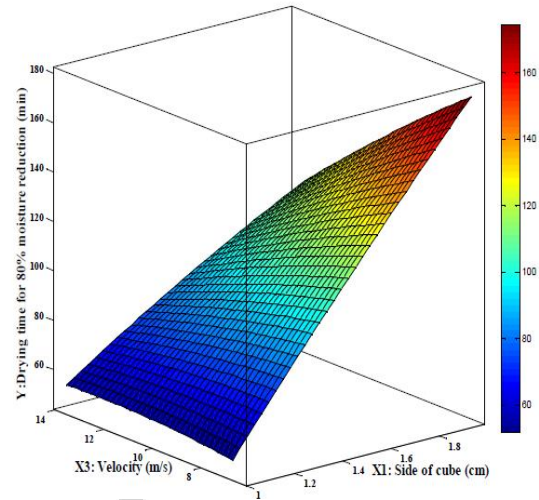


Figure 2 Response surface for drying time to the variation of cube size and air velocity at a constant temperature of 60 °C.

Fig. 2 shows that the drying time decreases when the size of pumpkin piece decreases from 2 cm to 1 cm and velocity of air is increased from 6.7 m/s to 13.6 m/s. It can also be noted that affect of size of piece on drying time is more than velocity of air. It is therefore recommended to keep the size of pumpkin pieces to smallest possible size while drying. Similarly fig. 3 shows that the effect of temperature on reducing the drying time is much more than that due to air velocity. However, the maximum temperature for drying will be governed by the end use of the dried product as temperature is known to influence the colour, texture and chemical composition of food products. The simulation results shown in Fig. 2-Fig 4 suggest that the drying time can be minimized by using small piece of solid and increasing the temperature of air [3].

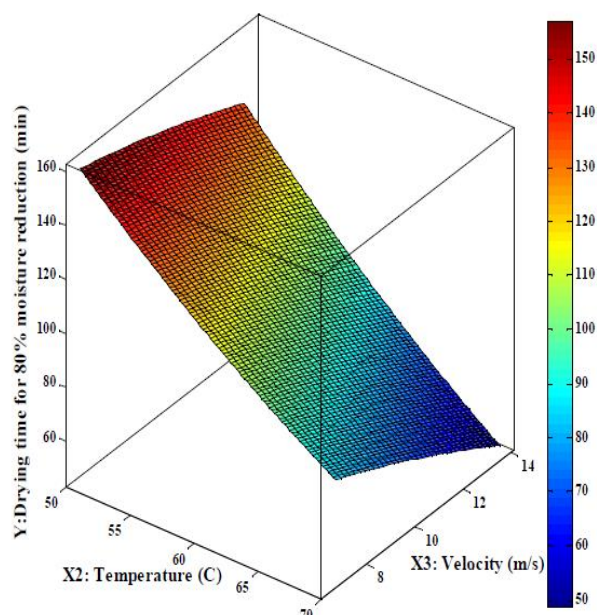


Figure 3 Response surface of drying time to the variation of velocity and temperature at a constant cube size of 1.5 cm.

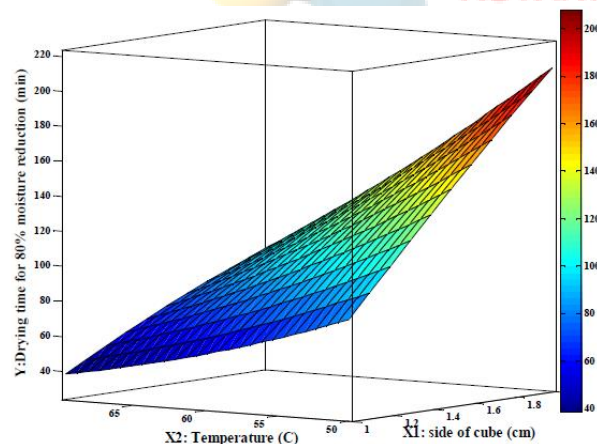


Figure 4 Response surface for drying time to the variation of temperature and cube size at a constant velocity of 10.15 m/s.

Conclusions

In this study, effect of size of pumpkin piece, velocity of air, and temperature of air

on drying time for 80% moisture reduction was explored. The mathematical model was developed for the prediction of drying time using Box-Behnken design. The predicted values of the drying time compared well with the experimental value. This work suggests that the smaller size and higher temperature will lead to faster drying of pumpkin with air velocity having minimal impact.

References

1. Yesilata, B., Aktacir, M. A., *Applied Thermal Engineering*, 2009, 748-752.
2. Kincl, M., Turk, S., Vrecer, F., *Int. J. Pharmacy*, 2005, 291, 39-49.
3. Keyhani, A., Taheri-Garavand, A., Rafiee, S., *International Transaction Journal of Engineering, Management, & Applied Sciences & Technology*, 2011, 2, 147-160.

NATURE AND SURFACE CHARACTERISTICS OF PIGMENT

[NILESH PRAKASH BADGUJAR- ASSISTANT PROFESSOR- DYES & PIGMENTS TECHNOLOGY]

Introduction

Before the dispersing process is discussed, it would be helpful to characterized pigment particles (Figure 1). Small, single crystals which are formed during pigment synthesis are called primary particles. Aggregates are primary particles which grow together via their faces; the dispersing process does not generally separate them. Agglomerates are associates of primary particles and/or aggregates joined by their edges Grinding processes are classified as true size

reduction (crushing of primary particles) and deagglomeration (grinding of aggregates to yield aggregates and/or primary particles). In the coating sector, dispersing or milling is considered to be the homogeneous distribution of disperse solid particles (e.g. pigments) in a liquid medium (mostly a solution of binder), i.e. effects of deagglomeration.

Process of pigment dispersion

As the dispersing of pigments is the most important step in paint manufacturing and is necessary for an understanding of dispersing agents, the underlying process will be discussed here briefly. During dispersing, adhesive forces (e.g. van der Waals) acting between the pigment particles must be overcome [Robert Ian McDowell, Electronic Theses and Dissertations (2006)]. The purpose of dispersing agents is to stabilize the deflocculated pigment dispersions, which were Figure 1, Simplified diagram of primary particles, aggregates and agglomerates.

Wetting and dispersing agents produced by the dispersing process, for a protracted period of time; i.e. the pigment particles must be prevented from flocculating. The purpose of the dispersing process is to separate agglomerates. Ideally, the outcome is a dispersion of primary particles and aggregates.

In practice, though, it is often only deagglomeration of large agglomerates to smaller ones which occurs [Bodo Müller et al (2010)]. Excessive dispersing (leading in extreme cases to crushing of primary particles) should be avoided at all costs, because after-treated pigment surfaces can be damaged and application properties can be impaired.

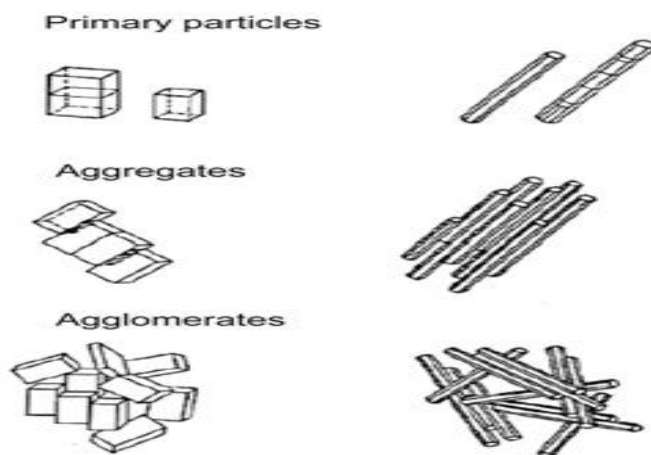


Figure 1.1 Simplified diagrams of primary particles, aggregates and agglomerates

References

1. Robert Ian McDowell, Electronic Theses and Dissertations, "Particle size reduction of phthalocyanine blue pigment," 8 (2006), 5-9.
2. Bodo Müller, Article on "Dispersing process," (2010), 11-12.
3. EL-Shall H., Journal of Powder Tech., vol.(38), (1984) 275 – 293.
4. V. C. Okore , A. A. Attama, K. C. Ofokansi, C. O. Esimone and E. B. Onuigbo, Indian J Pharm Sci, 2011, 73 (3): 323-328.
5. Roger F G Brown, "Article on "Additives in water borne coatings," (2012)
6. WilfriedScholzm, CD proceedings, "Paints and Coatings - How surfactants can advance new developments, (2004)
7. Longcheng Liu and Ivars Neretnieks, Literature Review on "Interaction between colloidal particles," (2010) 11-13.

LITERARY ARTICLES: સાહિત્યિક પ્રબન્ધ

Title

Author

DEMONETIZATION

[Sourav Choubey,EE]

BOOK REVIEW

[Nirali Tharwala CE]

રાષ્ટ્રગીતને રાષ્ટ્રગીત જ રહેવા દો

[Deepika Shah,CE]

બેટી સે ઔરત તક કા સફર

[Mayur Nai, Admin]

Worthiness of Earth

[Rutul Patel, EST]

DEMONETIZATION

[SOURAV CHOUBEY, ASSISTANT
PROFESSOR, ELECTRICAL
ENGINEERING]

The word Demonetization is used very frequently now a days. You might have heard the same. In this article I will discuss what Demonetization is and what its effects are. This article is completely based on the review and study of newspapers and articles.

Our honorable Prime Minister Mr. Narendra Modi announced the demonetization of Rs. 500 and Rs. 1000 notes on 8th of November, 2016 with the claimed reason as preventing the issue of counterfeit currency and to fight corruption and black money in India. .

History of Old Notes

Rs. 1000 notes first introduced by the Reserve Bank of India in 1938 under the British rule and subsequently demonetized in 1946. Post-independence, the denomination was once again introduced in 1954. In January 1978, all high-denomination banknotes of Rs. 1000, Rs.5000, and Rs.10,000 were demonetized in order to curb unaccounted cash money.[1]

In order to contain the volume of banknotes in circulation due to inflation the Rs.1000 banknote was reintroduced in November 2000 as a part of the Mahatma Gandhi Series of banknotes, which on 8 November 2016, was demonetized by the Prime Minister of India Narendra Modi.

What is Demonetization?

It is the radical financial step in which currency unit's status as a legal tender is declared invalid. The move is generally executed when old currency has to replace

with the new one's or whenever there is change of national currency.

What has the government done?

Prime Minister Narendra Modi's decision to scrap high value notes of Rs 500 and Rs 1,000 has created a shortage of cash in the system, leading to a lot of discomfort for the general public and businesses. Also, since there is a shortage of newly printed Rs 500 and Rs 2,000 notes, the situation has worsened. The move has also led to a shortage of lower denomination notes such as Rs 100 and Rs 50 that are still legal tender, as people have taken to conserving whatever the cash they have in their hand. [3]

How will it impact the economy?

Since our economy is heavily dependent on cash, as only less than half the population uses banking system for monetary transactions, demonetization has hit trade and consumption hard. With people scrambling for cash to pay for goods and services, the move is likely to take a big toll on the country's growth and output during the current fiscal. Consumption makes up for around 56% of India's GDP hence, a drop in spending will pull down growth. The current step could also lead to behavioral changes in households' savings and their consumption pattern, say economists.[3]

Benefits of Demonetization

You have to wait a little long in the banks, ATMs, Post Offices to collect your own money. A longer queues, Cashless ATMs but still peoples of India are very optimistic about the demonetization after effects.

- a. Black money holders are in danger
- b. Digitalization of India started

- c. Terrorist camps will be effected
- d. Defaulters clearing their due of taxes improve Indian economy and many more

We as an Indian should need to support our Government and we are doing so. Hoping that this Demonetization will definitely benefit us one day by any way.

REFERENCE

[1]"Demonetization of higher denomination banknotes". Your Guide to Money Matters. Reserve Bank of India. Retrieved 11 January 2012.

[2] "India Paper Money A Retrospect" Republic India Issues. Reserve Bank of India. Retrieved 11 January 2012.

[3]Economics times of India, 29th November, 2016

BOOK REVIEW ON THE WHITE TIGER BY ARAVIND ADIGA

[NIRALI THARWALA, CE DEPARTMENT]

Balram Halwai, the narrator of Aravind Adiga's first novel, "The White Tiger," is a modern Indian hero. In a country inebriated by its newfound economic prowess, he is a successful entrepreneur, a self-made man who has risen on the back of India's much-vaunted technology industry. In a nation proudly shedding a history of poverty and underdevelopment, he represents, as he himself says, "tomorrow."

Balram's triumphal narrative, framed somewhat inexplicably as a letter to the visiting Chinese premier, unfurls over seven days and nights in Bangalore. It's a rather more complicated story than Balram initially lets on. Before moving to Bangalore, he was a driver for the weak-willed son of a feudal landlord. One rainy day in Delhi, he crushed the skull of his employer and stole a bag containing a large amount of money, capital that financed his Bangalore taxi business. That business — ferrying technology workers to and from their jobs — depends, in turn, on keeping the police happy with the occasional bribe.

As a parable of the new India, then, Balram's tale has a distinctly macabre twist. He is not (or not only) an entrepreneur but a roguish criminal with a remarkable capacity for self-justification. Likewise, the background against which he operates is not just a resurgent economy and nation but a landscape of corruption, inequality and poverty. In some of the book's more convincing passages, Balram describes his family's life in "the Darkness," a region deep in the heartland marked by medieval hardship, where brutal landlords hold sway, children are pulled out of school into indentured servitude and elections are routinely bought and sold.

This grim world is far removed from the glossy images of bollywood stars and technology entrepreneurs that have been displacing earlier (and equally clichéd) Indian stereotypes featuring yoga and spirituality. It is not a world that rich urban Indians like to see. Indeed, when Adiga's book recently won the [Man Booker Prize](#), some in India lambasted it as a Western conspiracy to deny the country's economic progress. Yet Adiga isn't impressed by such nationalistic fervor. In bare, unsentimental prose, he strips away the sheen of a self-congratulatory nation and reveals instead a country where the social compact is being

stretched to the breaking point. There is much talk in this novel of revolution and insurrection: Balram even justifies his employer's murder as an act of class warfare.

“The White Tiger” is a penetrating piece of social commentary, attuned to the inequalities that persist despite India's new prosperity. It correctly identifies — and deflates — middle-class India's collective euphoria. But Adiga, a former correspondent for Time magazine who lives in Mumbai, is less successful as a novelist. His detailed descriptions of various vile aspects of Indian life are relentless — and ultimately a little monotonous. Every moment, it seems, is bleak, pervaded by “the Darkness.” Every scene, every phrase, is a blunt instrument, wielded to remind Adiga's readers of his country's cruelty.

The characters can also seem superficial. Balram's landlord boss and his wife are caricatures of the insensitive upper classes, cruel to and remote from their employees. Although Balram himself is somewhat more interesting, his credulousness and naïveté often ring false. When he goes to buy alcohol for his employer, he finds himself “dazzled by the sight of so much English liquor.” When he visits a shopping mall, he is “conscious of a perfume in the air, of golden light, of cool, air-conditioned air, of people in T-shirts and jeans. . . . I saw an elevator going up and down that seemed made of pure golden glass.”

The problem with such scenes isn't simply that they're overdone. In their surfeit of emblematic detail, they reduce the characters to symbols. There is an absence of human complexity in “The White Tiger,” not just in its characters but, more problematically, in its depiction of a nation that is in reality caught somewhere between Adiga's vision and the shinier version he so clearly — and fittingly — derides. Lacking

this more balanced perspective, the novel feels simplistic: an effective polemic, perhaps, but an incomplete portrait of a nation and a people grappling with the ambiguities of modernity.

રાષ્ટ્રગીતને રાષ્ટ્રગીત જ રહેવા દો

[DEEPIKA SHAH, ASSISTANT
PROFESSOR, CE DEPARTMENT]

ટી-૨૦ વર્લ્ડકપની ભારત-પાકિસ્તાન વચ્ચેની હાઇ
વોલ્ટેજ ક્રિકેટ મેચમાં ભારતની જાણીતી ઉદ્યોગ જગત,
ફિલ્મ જગત અને રાજનીતિક હસ્તીઓ ઉપસ્થિત રહી
હતી. ભારત-પાકિસ્તાન વચ્ચેની હાઇ વોલ્ટેજ ક્રિકેટ
મેચમાં ભારતીય ટીમને સપોર્ટ કરવા સદીના
મહાનાયક શ્રી અમિતાભ બચ્ચન પણ ઉપસ્થિત રહ્યા
હતા. આપણે સૌ જાણીએ જ છીએ કે શ્રી અમિતાભ
બચ્ચન પ્રોફેશનલ ગાયક તો નથી જ પરંતુ તેમના
અવાજમાં ગવાયેલ ગીતો કે કવિતાઓ એક અલગ જ
આકર્ષણ ઉભું કરે છે તેમજ એક સકારાત્મક માહોલ
પણ ઉભો કરે છે. કદાચ, આ જ એક કારણ હશે કે
વર્લ્ડકપના આયોજકોએ શ્રી અમિતાભ બચ્ચનને
રાષ્ટ્રગીત ગાવા માટેનું કાર્ય સોંપ્યું. પણ રે....

ભારતની આ વિકૃત બૌદ્ધિકતા.... શ્રી અમિતાભ બચ્ચનની સામે દિલ્લીના એક પોલીસ સ્ટેશનમાં ફરિયાદ દાખલ કરવામાં આવી કે તેઓએ રાષ્ટ્રગીત ખોટી રીતે પર સેકન્ડસના સ્થાને ૭૨ સેકન્ડસમાં ગાયું, સિંધ ના સ્થાને સિંધુ ગાયું ...વિગેરે....વિગેરે...

રાષ્ટ્રગીત એ આપણા રાષ્ટ્રીય તેમજ વ્યક્તિગત ગૌરવની તેમજ તે માટેની આપણી અંગત લાગણીઓનું આગવું અને અનેરું મહત્વ ધરાવે છે. આ ફરિયાદ થઈ ત્યારે મને ખૂબ દુઃખ થયું. મારા મિત્રો સાથે Facebook અને Twitter પર આ વાત ને Share કરી...પણ, કોઈએ પણ કોઈ અવાજ ઉઠાવવાની વાત ન કરી. એ સંઘ્યાએ ગવાયેલું રાષ્ટ્રગીત આજેપણ મારા કાનમાં પડઘા પડતા હોય તેમ ગુંજે છે. મને લાગે છે કે ફરિયાદીએ માત્ર સદીના મહાનાયકની સામે ફરિયાદ નોંધાવી નામના મેળવવાનું કૃત્ય માત્ર કર્યું છે, પણ આ ફરિયાદે અનેક પ્રશ્નો તો ચોક્કસ ઉજાગર કર્યા છે. મને લાગે છે કે રાષ્ટ્રગીત જ્યારે પણ ગવાય છે, ત્યારે તેની ટેકનીકાલીટીને સ્થાને વ્યક્તિની ભાવનાઓને આદર અપાવો જોઈએ. શું રાષ્ટ્રગીત એ

વસ્તુ છે કે જેના ગવાવાથી ફરિયાદ કે કેસ દાખલ થાય?

એકવાર Infosys ના સ્થાપક નારાયણમૂર્તિ પર પણ રાષ્ટ્રગીતના Instrumental Version ના કારણે કોર્ટમાં ફરિયાદ દાખલ કરવામાં આવી હતી. પરંતુ, તે કાર્યક્રમ એવા વિદેશી લાકો માટે હતો કે જેમને રાષ્ટ્રગીતના શબ્દો આવડતા પણ ન હતા અને એ કાર્યક્રમમાં રાષ્ટ્રપતિ પોતે ઉપસ્થિત હતા. આ તે કેવી માનસિકતા ? દર વખતે આપણો બૌદ્ધિક સમાજ ભારત અને ભારતની સંસ્કૃતિ તેના મૂળભૂત તત્વો પર જ આધાર કરે અને પરિણામે આપણે ખોઈએ છીએ ભારતનું મૂળભૂત સાચું બૌદ્ધિક ધન અને તેમનાથી સમૃદ્ધ થયા છે દુનિયાના વિકસીત દેશો. આપણે ત્યાં સ્વસ્થ ચર્ચા ને અવકાશ છે પરંતુ, થાય છે વ્યર્થ ચર્ચાઓ. આ ચર્ચાને આગળ વધારતા મારે કહેવું છે કે, ચોક્કસ એક મંચ પર આવી ચર્ચા થવી જોઈએ, અને રાષ્ટ્રગીતમાં વાંધાજનક, ગુલામીના ચિત્ર રજૂ કરતા શબ્દો દૂર થવા જોઈએ. કેટલીક ઘટનાઓ કે જે ભારતની સંસદ, કોર્ટ અથવા ધારાસભામાં ઉઠાવવામાં આવી છે, તે તરફ ધ્યાન આપવાની જરૂર છે. જેમ કે, હાલમાં રાજસ્થાનના

ગવર્નર શ્રી કલ્યાણસિંહે “અધિનાયક” શબ્દ દૂર કરવાની માંગ કરી છે અને તે માટેના કારણો પણ રજૂ કર્યા છે. તેઓએ કહ્યું છે કે આ શબ્દ બ્રિટીશ રાજની યાદ અપાવે છે. સુપ્રીમ કોર્ટના પૂર્વ જજ શ્રી માર્કન્ડેય કાત્જૂએ તેમના એપ્રિલ ૨૦૧૫ ના બ્લોગમાં “ભારત ભાગ્ય વિધાતા” પર પ્રશ્નાર્થ ઉઠાવ્યો છે. તેઓએ રવિન્દ્રનાથ ટાગોરને જ બ્રિટીશ સરકારના સહાયક ગણાવીને આલોચના કરી છે. બિહાર જનતાદળ (યુ)ના ધારાસભ્ય શ્રી ગંગેશ્વરસિંહ રાણાએ તો રાષ્ટ્રગીતને “ગુલામીનું પ્રતીક” ગણાવી પ્રશ્નાર્થ ઉઠાવ્યો છે. સુપ્રીમ કોર્ટના વકીલ શ્રી સંજીવ ભટ્ટનાગરે રાષ્ટ્રગીતમાંથી “સિંધ” શબ્દ દૂર કરી “કશ્મીર” શબ્દ ઉમેરવા માટેની માંગણી કરી છે. આવી તો અનેકોનેક ઘટનાઓએ આ દેશમાં આકાર લીધો છે પણ આ ફરિયાદી ક્યારેય આગળ આવ્યા નથી માટે તેમના તરફ શંકા કરવા મન પ્રેરાય છે. હાલમાં રાષ્ટ્રીય સ્વયંસેવક સંઘના જનરલ સેક્રેટરી (સરકાર્યવાહ) શ્રી ભૈયાજી જોષીએ આપેલ રાષ્ટ્રધ્વજના સન્માન કરવાના નિવેદન પર પણ આ બૌદ્ધિક આતંકીઓએ કાળો કેર વરસાવ્યો હતો અને રાષ્ટ્રધ્વજ અને ભગવા ધ્વજ માટે મીડીયામાં રમખાણો

ફાટી નીકળ્યા હતા. ઇન્દોર (એમ.પી.)ના કોંગ્રેસીઓ તો મોરચો લઈને સંઘના કાર્યાલય પર તિરંગો ફરકાવવા ગયા પણ ત્યાં તેમનું સ્વાગત અને સત્કાર જોઈને ભોંઠા પડી ગયા. આ વાતો અહીં ઉઠાવવાનો ઉદ્દેશ માત્ર એટલો જ છે કે, શું આ રીતે જ રાષ્ટ્રવાદીઓને હેરાન-પરેશાન કરવામાં આવશે અને ભારતની પ્રજા જોયા કરશે ? રાજનીતિએ તો સ્વતંત્ર ભારતમાં રાષ્ટ્રહિતને બાજુએ મૂકીને સ્વહિતને જ ધ્યાનમાં રાખ્યું છે અને તેનું જ પરિણામ છે કે “વંદે માતરમ” કે “સારે જહાં સે અચ્છા હિંદુસ્તાન હમારા” ના સ્થાન પર “જન ગણ મન” એ આપણું રાષ્ટ્રગીત છે, જે ૨૪.૦૧.૧૯૫૦ ના રોજ રાષ્ટ્રગીત તરીકે પસંદગી પામ્યું, ફક્ત બે દિવસ પહેલા કે જે દિવસે ભારતનું બંધારણ અમલમાં આવ્યું. આમ કેમ થયું? તે મુજબનો પ્રશ્ન આજદિન સુધી ઉપસ્થિત થયો હોય તેવું ધ્યાનમાં નથી. શા માટે ભારતીયોની ભાવનાઓ સાથે રમતો રમવામાં આવે છે? મને મનમાં બીજો પણ એક પ્રશ્ન થાય છે કે, ભારત અનેકાનેક ભાષાઓ અને બોલીઓ ધરાવતો દેશ છે. દરેક ભાષા અને બોલીઓના ઉચ્ચારણો વિવિધ અને અલગ છે. બંગાળીમાં ક્યારેય “વિ” સાંભળવા જ નથી

મળ્યું. ત્યાં તો “વિ” ના સ્થાને “બિ” જ સાંભળવા મળે છે, ક્યાંક “હું” ના સ્થાને “મું” જ સાંભળવા મળે છે, ત્યારે આ મતલબની ફરિયાદો થાય છે? ના, હરગીઝ નહીં..... માટે, મારે કહેવું છે કે રાષ્ટ્રગીતની ભાવનાઓની કદર થવી જોઈએ જ્યાં સુધી આ આપણું રાષ્ટ્રગીત છે. દેશપ્રેમ અને રાજનીતિ, દેશપ્રેમ અને વ્યક્તિગત રાગ દ્રેષ એક સાથે કાર્ય ન કરી શકે. રાષ્ટ્રગીત સાંભળતાની સાથે જ રોમ-રોમમાં ભારત ભક્તિ જાગૃત થવી જોઈએ અને સર્વસામાન્ય ભારતીયના મનમાં તો થાય જ છે. વાંકદેખા લોકોની આ દેશમાં કમી નથી તેના સામે કયા પગલા લેવા એ સરકારોએ વિચારવું રહ્યું. બાકી તમે કહો રિધમમાં રાષ્ટ્રગીત વાગતું હોય અને છેલ્લે “જય હે” સાંભળી ને કે ગાઇને આપણે રોમાંચિત થઇ ઉઠીએ છીએ કે નહીં? આપણી ટીમ મેચ હારી શકે કે જીતી શકે પણ ભારતીય ધ્વજ કે ગીત ક્યારેય હારતા નથી તે તો તેનું ઉચ્ચ સ્થાન જાળવી જ રાખે છે... આ જ સ્થાન આપણા મનમસ્તિસ્ક પર પણ અંકિત થાય તે અતિ આવશ્યક છે. સરકાર કે રમતો રમતી ટીમના નિર્ણયો પર આપણે દલીલો કરી શકીએ પણ ભારતનું સાર્વભૌમત્વ જેની

સાથે સંકળાયેલું છે, તેવા શ્રદ્ધાકેન્દ્રો દલીલો અને ભેદભાવથી મુક્ત હોવા જોઈએ અને તે જ પ્રજા તરીકે આપણું સામુહિક કર્તવ્ય છે. આ સમય છે વિચારવાનો, આપણી પ્રતિબદ્ધતાઓને સમજવાનો.... આપણે થોડા તો હળવા થઇએ. ન જોઇતા મુદદાઓ પર દેશ આખાને બાનમાં લેવાની વિકૃત બુદ્ધિ સામે શાશ્વત બુદ્ધિએ પોતાનું યોગદાન આપવું પડશે. નકામા મુદદાઓથી દેશને વિચલીત કરવાને બદલે દેશની મૂળભૂત સમસ્યાઓ સામે સંગઠિત થઇએ. ફાલતુ વાતો પર લીટીગેશન કરવાને બદલે દેશહિતોના મુદ્દે લિટીગેશન કરીએ અને બતાવીએ સમગ્ર વિશ્વને કે શું છે ભારતની સાચી વિધ્વત્તા? અંતમાં, ભારત એ પરિવર્તનને સ્વીકારનારો દેશ છે. કદાચ રાષ્ટ્રગીત પણ બદલાઇ જશે, તો તેને સહજ સ્વીકારીને આપણે આગળ વધી જઇશું પણ જે પરિવર્તનને સ્વીકારવાની આપણી વૃત્તિ આપણી તાકત હતી તે આજે કમજોરી તો નથી બની રહી ને? બૌદ્ધિક આતંકવાદીઓ રોજ-રોજ કુતર્કથી નવા મુદદાઓ તરતા મૂકે અને આપણે આપણા જ ભાઇ- બાંધવો સામે તો શસ્ત્રો નથી ઉઠાવી રહ્યા ને? આ એક વૈશ્વિક

સ્તરે આપણી સામે છેડાયેલું યુધ્ધ છે, જેમાં સામે પક્ષે દેખાનારા આપણા જ પરિવારજનો છે.. પરંતુ ફરી મહાભારત તૈયાર છે, અર્જુનનો વિષાદ દૂર કરી કૃષ્ણના વિરાટ સ્વરૂપના દર્શન કરી આ મહાયુધ્ધમાં વિજયી થવા પ્રશસ્ત થઇએ.

જય હો!

બેટી સે ઔરત તક કા સફર

[MAYUR .H. NAI, ASSISTANT OF ADMINISTRATIVE]

કિસી કે ઘર મેં બેટી બનકર જનમ લેતી હૈ
પિતા કી ઇજ્જત, માં કી પરછાઈ બનકર રહતી હૈ
અપને બડે ઔર છોટે ભાઈ -બહેન કે સાથ હસ્તી -ખેલતી રહતી હૈ
ઇન્હી રિશ્તે - નાતો કો યહ અપની દુનિયા સમજ લેતી હૈ
ફિર એક દિન

નયે રિશ્તે, નયી જિંમ્મેદારિયોં સે ઉસે હમ જોડ જાતે હૈ
વિદાઈ પર પીછે બસ કુછ યાદેં યહ છોડ જાતી હૈ
કુછ ઔર રિશ્તો કો નિભાને કે લિએ,
યહ બેટી ઔરોં કે ઘર કો સજાને જાતી હૈ
અપની મહક સે કિસી ઔર કે ઘર કો મહકાતી હૈ

એક બેટી કિસી કી પત્ની, કિસી કી બહુ, કિસી કી ભાષી બન જાતી હૈ

યહ એક લડકી, ના જાને કિતને રિશ્તો મેં ઢલ જાતી હૈ
હર એક રિશ્તે કો નિભાના ઇસકે લિએ એક ફર્જ કહ લાતા હૈ
ઇસકે હૃદય મેં સબ કે લિએ સિર્ફ પ્યાર હી પ્યાર રહ જાતા હૈ
પહેલે બેટી, ફિર બહેન, ફિર પત્ની, ફિર બહુ, ફિર માં, ફિર દાદી - નાની

યહ ઔરત ના જાને કિતને રિશ્તો મેં સિમટ જાતી હૈ

એક નન્હી સી જાન ખાનદાનો કો ચલાતી હૈ

યે ઔરત તેરી કોઈ પરિભાસા તેરી કોઈ એક પહચાન નહીં ...

તેરી મહિમા મેં દર્શા સકૂં, ઇતની મેરી કવિતા મેં જાન નહીં

યે ઔરત તુઝે ક્યા કહૂં, તેરી હર બાત નિરાલી હૈ ...

તૂ એક એસા પોધા હૈ જિસ ઘર રહે બહાં હરિયાલી હી હરિયાલી હૈ
.....

એક ઔરત કો કબી પરાયેપન કા એહસાસ ન દિલાઓ

જિસને હર કદમ પર અપને એહસાસોં કા બલિદાન દિયા ...

કબી ઉસકી જિન્દગી કો કરીબ સે જાન પાઓ

તેરી શાન મેં યે સિર્ફ ઇતના હી કહ સકતા હૈ

તેરી ઁંચાઈયોં કે સામને આસમાન ભી નહીં રહ સકતા હૈ

ઇસ કવિતા સે મેરા સિર્ફ ઇતના સા એક પૈગામ હૈ

યે ઔરત !!! તુઝે મેરા સર ઝૂકા કર સલામ હૈ

She gave up Time,

She gave up Studies,

She gave up Family,

She gave up Religion,

She gave up Whole Life.....!

All of these For Real Motherhood.

This is called Mother....! And I will Follow
Her.....

WORTHINESS OF EARTH

[RUTUL PATEL, 6TH SEM EST STUDENT]

Frankly speaking, Earth is of so much worth. Please peer into the analysis of every letter of the word "Earth". *E* stands for Environment; *A* for Art; *R* for Renovation, *T* for Technology & *H* for Health. Now let us see how much valuable each and every word is.

Environment means surrounding of us. It includes all living and non-living organisms. Environment gets diluted and polluted by unwanted or undesired material which is harmful for all the organisms. It depreciates the value of earth because of polluted environment.

Art means the creation of the nature or artificial. Earth has so many gifts from nature like rivers, fountains, mountains, forests etc. There are very important

We hope that given information for
Daughter too, a pride of the family will be
useful to all.

components of the earth which inevitably adds to the worth of the earth.

Renovation is done by the human beings in order to increase the value of the earth. In renovation we can say that the gardening, planting trees in the good manner to beautify it. Renovation is the gift given by the human beings to the earth.

Technology is the most important term for all categories. Technology shows our interest & hard working to achieve something. Some technologies are helpful and reduce the time for human beings. On the other hand, some technologies can harm or make undesired impact over the environment to reduce earth value.

Health is wealth. Good health shows the good environment. Health is attached with all above 5 terms. Health is directly proportionate with the environment & earth. If the earth remains clean, Health will happen effortlessly.

To me, worth of earth tends to infinity.

NOBLE NOBELS



Name: Sir J. Fraser Stoddart

Born: 24 may 1942, Edinburgh, United Kingdom.

Affiliation at the time of the award: Northwestern University, Evanston, IL, USA.

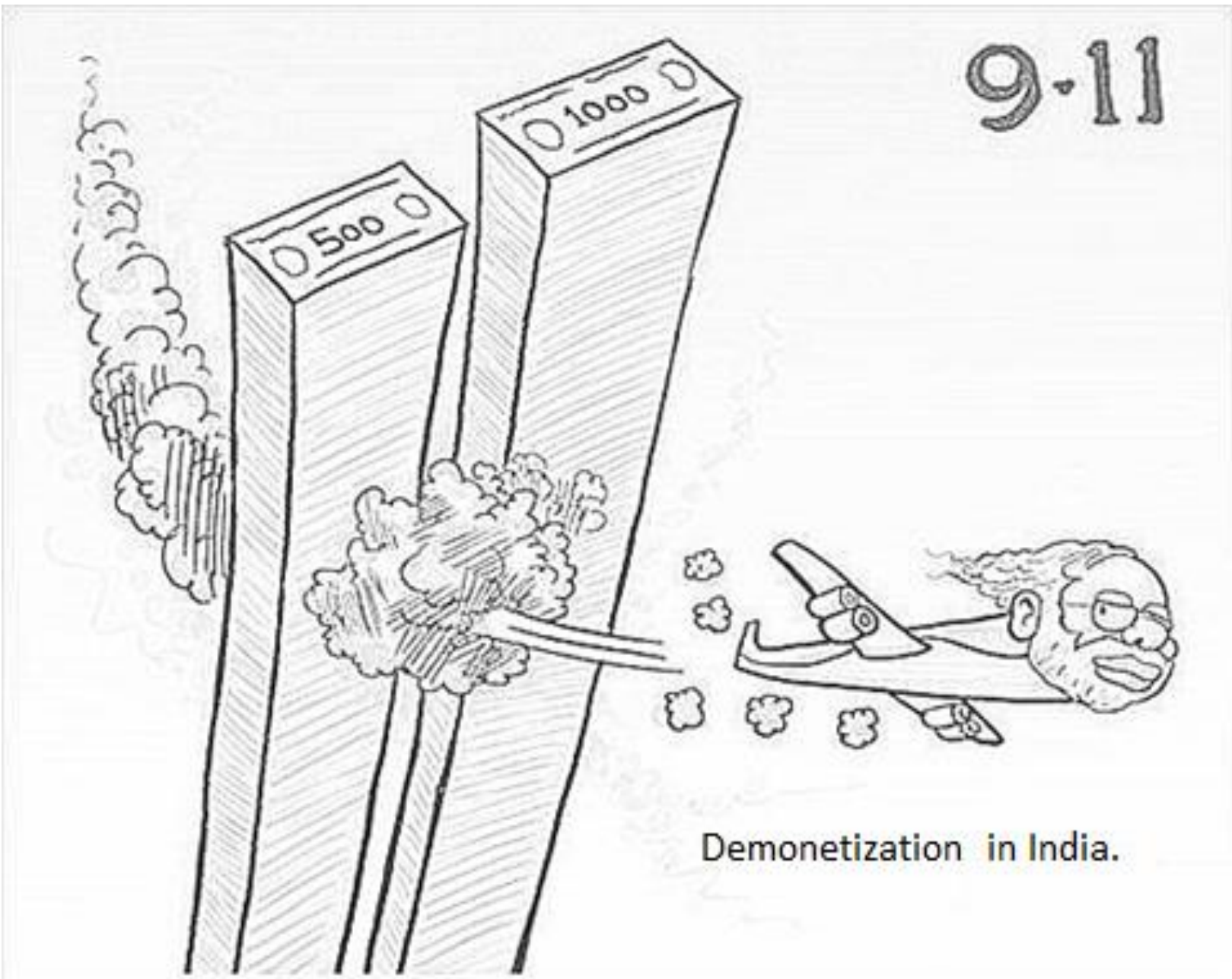
Prize motivation: “For the design and synthesis of molecular machines”.

Field: Chemistry

Work:

The groundbreaking steps taken by Jean-Pierre Sauvage, Fraser Stoddart and Ben Feringa in developing molecular machinery have resulted in a toolbox of chemical structures that are used by researchers around the world to build increasingly advanced creations. One of the most striking examples is a molecular robot that can grasp and connect amino acids. This was built in 2013 with a rotaxane as its foundation.

ART CORNER: चित्र-लेख



KNOW OUR FACULTY: गुरुं-विजानियात्

PRESENTED PAPERS

National Conference: 4



NAME: VIJAY N PATEL

DESIGNATION: Assistant Professor

DEPARTMENT:

Polymer & Rubber Technology under
Chemical Technology Department

EDUCATIONAL QUALIFICATIONS:

B.E (Plastic Tech.),
M.Tech. (Polymer Science & Tech.)

EXPERIENCE: 18 years

RESEARCH INTEREST:

Polymer Processing,
Polymer Blends & Nano composites,
Rubber Compounding

ACADEMIC INTERESTS:

Polymer Materials,
Polymer processing,
Design of Moulds,

PUBLICATIONS:

National Journals: 2



NAME: MS. VINITHA VAKKAYIL

DESIGNATION: Assistant Professor

DEPARTMENT:

Maths, Science
& Humanities

EDUCATIONAL QUALIFICATIONS:

MA (English Language & Literature), SET,
Pursuing Ph.D.

RESEARCH INTEREST: Feminist
Writing

ACADEMIC INTERESTS: Linguistics,
Post-Colonial Literature, American
Literature, Psycho analytic & Archetypal
Criticism

KNOW OUR STAFFS': सहकार्यकर्ताम्जानियात



NAME: MISS NIDHI V. PATEL

EDUCATION QUALIFICATION:

Bachelor of Engineering (B.E) in
Environmental Science and Technology

DESIGNATION: Junior Research
Assistant (R & D cell)

PROJECT WORK: Precious metal
recovery from E-Waste, spent acid recovery,
Paint sludge to Primer, Plastic Waste to fuel

ACHIEVEMENTS: Secured rank in GTU
top ten list

HOBBIES: Reading, Cooking, Traveling,
Craft



NAME: MISS JAYSHREE M. GAMI

EDUCATION QUALIFICATION:

Bachelor of Engineering (B.E) in
Environmental Science and Technology

DESIGNATION: Junior Research
Assistant (R & D cell)

PROJECT WORK: Precious metal
recovery from E-Waste, Spent acid recovery,
Metal recovery from COD Waste water

ACHIEVEMENTS: Secured rank in GTU
top ten list

HOBBIES: Reading, Craft, Drawing

PUZZLE

[MEHTA JIGAR, 3RD SEMESTER,
DEPARTMENT OF ELECTRICAL
ENGINEERING]

- Find the relationship between the numbers in the top row and the numbers in the bottom row, and then determine the missing number.

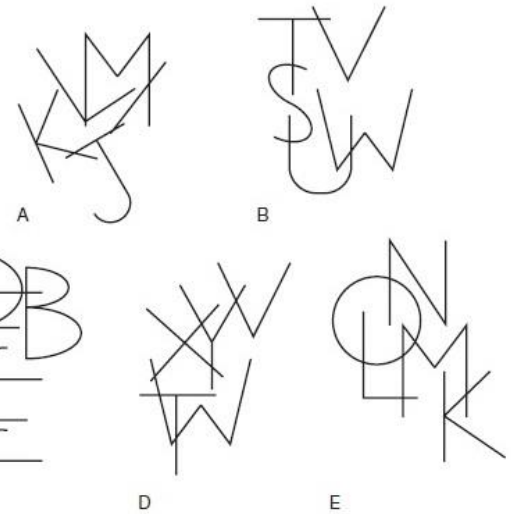
12	24	36	45	60	84
6	8	9	9	10	?

- What day comes three days after the day which comes two days after the day which comes immediately after the day which comes two days after Monday?

- SUNDAY
- MONDAY
- TUESDAY
- WEDNESDAY
- THURSDAY
- FRIDAY
- SATURDAY

- What can travel around the world while staying in a corner?
- A girl who was just learning to drive went down a one-way street in the wrong direction, but didn't break the law.
How come?

- Which is the odd one out?



- Who makes it, has no need of it.
Who buys it, has no use for it.
Who uses it can neither see nor feel it.
What is it?

“TOP NATIONAL NEWS OF LAST 3 MONTHS”

[PARTH PRAJAPATI, 3RD SEMESTER
CHEMICAL ENGINEERING]

[1. How technology can transform teaching,
seminar at Ahmadabad:
[1st Oct 2016]



AHMADABAD: The Times NIE Principal's Seminar 2016 was held on Friday, in association with Byju's at Hyatt, Ahmadabad. The evening saw a large gathering of principals from various schools of Ahmadabad and Gandhinagar.

The speakers for the day were Prof Subhash Bhatnagar, honorary Professor at Indian Institute of Management, Dr Hansel Bhachech, psychiatrist, Kannan Somasundaram, senior assistant editor with The Times of India and Sahil Sheth, business head, Byju's. The guest speakers began the seminar by speaking on 'Transforming education with Innovation and Technology'.

2.IIT-Kharagpur tech push to help visually impaired kids read Bangla classics.[31st Oct 2016]



KOLKATA: Children with blindness will soon be able to savour classics of Bengali literature, thanks to a combined effort of three top institutes of higher education: IIT-Kharagpur, Jadavpur University (JU) and Indian Statistical Institute (ISI).

The computer science and technology department of IIT-Kgp has devised software that is helping render some of these evergreen texts into Braille, the first time this is being done with an Indian language.

3. The PM's announced that Rs 500 and Rs 1000 notes will no longer be valid.

[8TH Nov 2016]



Taking the nation by surprise, Prime Minister Narendra Modi tonight announced demonetization of Rs 1000 and Rs 500 notes with effect from midnight, making these notes invalid in a major assault on black money, Fake currency and corruption.

In his first televised address to the nation, Modi said people holding notes of Rs 500 and Rs 1000 can deposit the same in their bank and post office accounts from November 10 till December 30.

4. Sports: [20th Nov 2016]



P.V. Sindhu wins first title [china open series title]

Easy doesn't do it for PV Sindhu. A day after saving three match points in a grueling semifinal, Sindhu was again pushed to three games in the China Open final. And much like Saturday, the Indian brought the goods to beat China's Sun Yu 21-11, 17-21, 21-11 in 69 minutes to win her maiden Super Series title.

5. Zero waste management, East Delhi:

[12th Dec 2016]



East Delhi Municipal Corporation has decided to implement a zero waste management plan in Vasundhara Enclave and make it a model colony. The idea is to ensure that no dumping and littering is done in this residential locality. The civic body has roped in NGO Chintan for this purpose.

"The NGO has submitted an action plan and it has been approved. If our experiment in Vasundhara Enclave is successful, the plan will be replicated in Preet Vihar as well. It will create awareness among residents about how to segregate their day-to-day waste in separate bags. We will collect the segregated waste and take it to a material recovery facility," said east corporation commissioner.

6 .Cyclone Vardah, Tamil nadu:
[17th Dec 2016]



With the help of Data provided by Insat-3DR and ScatSat-1, more than 10,000 people were rescued in Chennai, Thiravallur and Kancheepuram districts.

MUMBAI: Two ISRO satellites played a key role in saving a large number of lives mainly in Tamil Nadu when Cyclone Vardah unleashed its fury on Monday.

An ISRO official told TOI that data from the two satellites –Insat-3DR and ScatSat-1 helped predict the cyclone's movement, enabling authorities to alert the public.

7. Lt. Gen Bipin Rawat to be next Indian army chief:
[17th Dec 2016]



Lieutenant general Bipin Rawat will be the new chief of Army Staff while Air Marshal B.S.Dhanoa will be the new chief of Air Staff, Ministry of Defense confirmed on Saturday.

“Government has decided to appoint Lt Gen Bipin Rawat, vice chief of army staff, as the next chief of army staff with effect from afternoon of Dec 31,” the Defense ministry said in a tweet.

Rawat will succeed General Dalbir Singh, who will retire at the end of this month while Dhanoa will replace Arup Raha at the helm of Air Staff on Dec 31.

“TOP INTERNATIONAL NEWS OF YEAR- 2016”

[PARTH PRAJAPATI, 3RD SEMESTER
CHEMICAL ENGINEERING]

1. USA Elections: [9TH Nov 2016]



Donald Trump shattered expectations on Tuesday with an election night Victory that revealed deep anti-establishment anger among American voters and set the world on a journey into the political unknown.

The Republican nominee has achieved one of the most improbable political Victories in modern US history, despite a series of controversies that would easily have destroyed other candidacies, extreme policies that have drawn criticism from both sides of the aisle, a record of racist and sexist behavior, and a lack of conventional political experience.

After surprise early victories in Florida, North Carolina and Ohio, it fell to the rust belt states of the industrial Midwest to determine the result of his stunning upset.

2. Plane crash: [29th Nov 2016]



After climbing the ranks of Brazilian soccer, the team was on its way to face one of its biggest tests yet: a chance to win the final of the Copa Sudamericana, an international competition for South American soccer.

But over the mountains near Medellin, Colombia, the plane carrying the members of Chaperones, a soccer team from a scrappy industrial city in southern Brazil, made an emergency call on Monday night after experiencing an electrical failure, the authorities said.

Moments later, it crashed into the mountains with 77 people aboard. Only six people survived the crash, aviation officials said: three players, two crew members and a journalist who was accompanying the team.

3. Afghanistan's efforts to welcome women in military: [7th Dec 2016]



KABUL: Captain Safia Ferozi, who was a refugee since childhood, is now flying a transport aircraft for Afghanistan air force. She is country's second female pilot. This is a sign of the efforts being made by Afghanistan government to bring more women into the armed forces.

The 26-year-old Ferozi is married to another pilot, who works in the same unit supporting army ground forces. They are part of a small Afghan air force that is trying to take a greater role in fighting against the Taliban insurgency.

4. China opens 1st fully owned satellite ground station: [16th Dec 2016]



China has launched its first fully owned overseas satellite ground station near the

North Pole which could enable Beijing to collect satellite data nowhere on the Earth at a speed it aid was the fastest in the world.

The facility, located in Sweden about 200 kms north of the Arctic Circle, would allow China to collect satellite data anywhere on Earth at speeds that were more than twice as fast as before, said the Chinese Academy of Sciences, the academic governing body that built and runs the station.

5. Sports:
[18th Dec 2016]



India wins junior hockey world cup

For the second time this year, Harjeet Singh's junior Indian hockey team beat Belgium on the way to lifting a trophy; this one, however, was the biggest prize of all. Congratulate the Indian team on their victory

In its first such final in 15 years, India overwhelmed Belgium 2-1 to lift the g '016 Hockey Junior World Cup at Lucknow's Major Ohyan Chand Hockey Stadium on Sunday and become the second team, after Gagan Ajit Singh's colts in 2001, to get their hands on the most coveted title.

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Block No 402
At & Po: Vataria, Ankleshwar-Valia Road,
Dist: Bharuch –393002, Gujarat.
Telephone: 02643-290825
Email: hr@srict.in
Website: www.srict.in



