"We are what we repeatedly do. Excellence, therefore, is not an act but a habit". - Aristotle



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Convocation 2012

Interface Volume 13

Expressing Creativity

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EDITORIAL:

It is a matter of immense pleasure to bring forth the Thirteenth volume of Interface- an annual magazine of Institute of Technology, Nirma University. The magazine not only unfolds the creative potential of the students and staff members of the Institute but also traces a comprehensive record of the achievements and landmarks which were attained in the year 2012 by the Institute of Technology, Nirma University.

I take this opportunity to express my sincere gratitude to all those who have been a source of inspiration in the accomplishment of this task.

This magazine would not have been possible without the constant motivation and the guidance of Dr K Kotecha – the Director, IT-NU. His enlightening inputs and valuable suggestions made this venture a delightful experience.

I am thankful to Ms. Sapna Miranda, the co-editor of Interface for her constant support in compiling and editing the content.

I wish to extend my thanks to all the members of editorial board for their continuous support and timely submission of data whenever required. Thanks are also due to the student coordinators of the magazine for their cooperation.

I am also thankful to Mr. Dharmesh Vaishnav for his support in compiling the content.

Finally, thanks to all the contributors for their various expressions in the form of articles, poetry and sketches.

Wish you a joyful reading!

Dr. Vaibhav Shah Editor vaibhav.shah@nirmauni.ac.in

FROM THE DESK OF DIRECTOR



Today with great pleasure I congratulate all the contributors for the 13th volume of Interface effusing with creativity, self expression, imaginations and more.

People dealing with Technology are always being seen as the serious, non-creative, less literary and devoid of emotions but initiatives like this magazine proves all wrong., it portrays engineers as doers and dreamers; explorers and innovators ; passionate and receptors.

The magazine serves as a platform to the inspired voices of both Students and faculty of Institute of Technology-Nirma University to put forth their fountains of creativity in front of eager readers.

As Pablo Picasso has said,

"There are painters who transform the sun to a yellow spot, but there are others who with the help of their art and their intelligence, transform a yellow spot into sun"

Engineers and Artist share the same vision, same imagination and same creative powers. Both of us imagine things, visualize scenarios and make impossible things possible.

I am sure the magazine will be the meeting point of the artist in the engineer penning down some delightful and brilliant pieces of works.

Dr K Kotecha

EXPRESSIONS

An Autobiography of a Poet

- Dr Vaibhav Shah, Asst. Professor, Maths & Humanities Dept.

I wonder how I started it I thought often But could never express One day..... Something entered my heart Blending feelings with emotion Merging reality with dreams Created a poet in me I wrote what I felt I conveyed what I wished Sometimes struggled with words But finally emerged As a communicator With informal message In a formal style People knew me They loved me And gave respect To my reflection I am satisfied For what I have achieved The ray of hope The way to the world Full of imagination Devoid of depression Proceeding towards a goal I am determined Not to withdraw From here This is a beginning Of my journey Lasting for infinite.....

સફર

-Prof. Sapan H Mankad (IT) Computer Science & Engineering Dept.

સફ્ટ કરતાં ડામરની સડક પર, નજર પડી મારી વિશાળ ગગન પર, અંધકારે સર્જી હતી પોતાની આણ સમગ્રતચા, ચંદ્ર તારા વિના નજર ન આવતું કાંઈ જ્યાં.

વાદળોએ કર્યો જંગ અંધકાર સામે ચંદ્ર તારા પણ અદ્દશ્ય થયા જેની સામે તેવાં તિમિરમાં મેં તેજોમય લિસોટો જોયો, નિબિડને પલકવારમાં ગાયબ થતો જોયો.

શું હતું જમએ તિમિરનો છેદ ઉડાડ્યો ? હતી કોઈ ઉલ્કા કે કોઈ તારો પૂંછડિયો, શંકાશીલ તો કહેશે, હશે કોઈ પરગ્રહવાસીની ઉડતી રકાબી, તો અમુક કહેશે, આ બધી ચર્ચા જ છે નકામી!

સત્ય ભાગવા તો અવકાશની સફ્ટ છે અનિવાર્ચ, સંશોધકો પણ પ્રચત્નશીલ છે ભાગવાને જેનો મર્મ તેવાં આ બ્રહ્માંડના ગૂટ ૨હસ્યોનો છે શો ઉકેલ? તે ભાગવા સૌએ કરવી પડશે એક પહેલ...

Institute of Technology, Nirma University

To My Students

- Sapna Miranda Assistant Professor-English Mathematics and Humanities Department

Little do you realize now Dear student as of now-The days you spend here Will blink and fade ere-

Turnstile of time turns Forward alone it runs Moments slipping by Memories heavily lie Upon mind's fond eye

No burden of worldly care now; Adulthood with baggage awaits-Answer you must, innocence slowly abates Theatre of life will take a bow

> Let the river of joy flow Infuse in you love aglow Of life's little wonders Whereupon heart wanders

> Revolutions you may lead But now you just go read Dancing away your tedium Singing aloud carpe dieum



અદ્ભુત !!! અવર્ણનીચ !!! કલ્પનાતીત !!!

Prof. H K Patel Associate Professor, Instrumentation & Control Dept.

"અંગદનો પગ"

હરેશ ધોળકિયા લિખિત શિક્ષણજગતને કેન્દ્રમાં રાખીને મનુષ્યના વ્યક્તિત્વને "પ્રતિભાશાળી" અને "સામાન્ય" આ બે પ્રકારમાં વર્ગીકૃત કરી બંને પ્રકારના વ્યક્તિત્વને અભૂતપૂર્વ રીતે તાદ્રશ કરાવતી કથાવસ્તુ અને હૃદયસ્પર્શી નિરૂપણ… અભૂતપૂર્વ અનુભૂતિ…

ફક્ત શિક્ષક હોય તેણે જ નહિ દરેક વ્યક્તિ કે જેનામાં "સંવેદના" હજુ મારી પરવારી નથી અને જે ખરેખર પોતાની જિંદગીને "સાચ્ચેસાચ" જીવવા માંગે છે એવી દરેક વ્યક્તિએ ફરજીયાત વાંચવા જેવી અજોડ કૃતિ..

> પુસ્તકના પૃષ્ઠ ઉપર લેખકના શબ્દો... વિશ્વમાં બે પ્રકારના લોકો હોય છે. પ્રતિભાશાળી

> > અને

સામાન્ય...

પ્રતિભાશાળી લોકો આ વિશ્વને પ્રગતિશીલ કરે છે

પણ

વિશ્વનો કબજો હંમેશા "સમાન્યો" પાસે જ રહ્યો છે. સામાન્યો હંમેશા પ્રતિભાશાળીઓને હેરાન કરવા, હટાવવા, પછાડવા પ્રયાસ કરતા રહ્યા છે. તેઓ પ્રતિભાશાળી બાહ્ય રીતે હેરાન કરી શકે છે, પણ, ક્યારેય, આંતરિક રીતે ખલેલ પહોંચાડી શકા નથી. પ્રતિભાશાળીઓ "રામાયણ"ના "અંગદ"ના પગ જેવા હોય છે. અચળ અને સ્થિળ. તેને સામાન્યો કદી ખેસવી ન શકે. પ્રતિભાશાળી અને સામાન્ય વ્યક્તિની સંઘર્ષની આ કથા છે. વિશ્વના પ્રતિભાવાનોની પ્રતિમાને પખે પખે પ્રજ્વલિત કરતી અને અંજલી આપતી આ એક વૈચારીક કથા છે.

પેટ્રોલ આ રીતે પણ બચાવી શકાય છે.

Dr. Ankur Dwivedi Assistant Professor, Chemical Engineering Department

આપણે લોકો રોજ બુમાબુમ કરીએ છીએ કે પેટ્રોલના ભાવ દિવસે ને દિવસે વધતા જ જાય છે. આપણે સરકારને ગાળો દઈએ છીએ કે સરકાર આ માટે કશું જ કરતી નથી પણ ક્યારેય આપણે વિચાર્યું છે કે આપણે પણ કદાચ સરકાર જેટલા અથવા તો સરકાર કરતા પણ વધુ આને માટે જવાબદાર છીએ. તમે તરત જ પુછશો કે આપણે કેવી રીતે જવાબદાર છીએ? જો આપણે પેટ્રોલ સાચવીને વાપરીએ તો એ પણ એક જાતની બચત જ છે ને. નજીકમાં જ કોઈ કામ હોય તો પણ આપમે ચાલવાનું પસંદ ના કરતા આપણું વાહન લઈને જ જવાનું પસંદ કરીએ છીએ. તમને એ ખબર છે કે તમે આવા નાના-નાના અંતર માટે વાહન લઈને જશ તો પેટ્રોલનો વધુ વ્યય કરશો કારણ કે નજીકના અંતર માટે ક્લચ-બ્રેક વધુ વાપરવા પડે અને આમ પેટ્રોલનો વ્યય થાય છે જે આપણે ક્યારેય વિચારતા નથી. આવા નાના-નાના કામ માટે જો ચાલતા અથવા તો સાયકલ વાપરવાની આદત પાડીશું તો બે ફાયદા થશે. એક પેટ્રોલ બચશે અને બીજું તંદુરસ્તી પણ સારી રહેશે.

તંદુરસ્તી પરથી એક બીજી અગત્યની વાત કરી લઈએ. આજકાલ લોકો પોતાની તંદુરસ્તીને લઈને ખૂબ સભાન થઈ ગયા છે. રોજ સવારે ચાલવા અથવા દોડવા અથવા તો જિમ જવા નીકળી પડે છે. જો તમે સવારે કોઈ જાહેર બગીચા કે જોગર્સ પાર્કસ કે હાઈવે કે પછી રમત-ગમતના મેદનામાં જઈને જુઓ તો લોકોના ટોખેટોખા સવારના પહોરમાં ટેર્ક સુટ અને કાનમાં ઈઅરફોન લગાવીને ચાલતા જોવા મળશે. આ બધા આ જગ્યાઓએ ચાલવા માટે પાછા પોતાના ટુ વ્હીલર્સ અથવા તો ફોર વ્હીલર્સ લઈને આવ્યા હોય છે (જે લોકો ખરેખર ચાલતા જાય છે એમને આ વાત લાગુ પડતી નથી... માટે મન પર ન લેતા). જો આવી કોઈ જગ્યાએ સવારે જઈને જોશો તો લાઈન બંધ મોટી મોટી ગાડીઓ અને બાઈક્સ પાર્ક કરેલી જોવા મળશે. મારો આ બધાને એક સવાલ એ છે કે જો તમે ચાલવા જ આવ્યા હોય તો પછી આ બધાની અહીં શું જરૂરત છે ? ઘરેથી જ ચાલતા નીકશોને તો ચાલવાનું પણ થઈ જશે અને પેટ્રોલ પણ બચી જશે. હા કદાચ તમારું ઘર આવી જગ્યાથી દુર હોય તો સાયકલ વાપરો, પગની પણ કસરત થઈ જશે અને પેટ્રોલ પણ બચી જશે. કદાચ સાયકલના ચાલવી શકાતી હોય કે ના આવડતી હોય તો આજકાલ તો ઈલેક્ટ્રીક વાહનો અને એમાંય ખાસ કરીને ટુ વ્હીલર્સ બજારમાં ઉપલબ્ધ છે તે લઈને જાવ.

(જે લોકો બગીચા કે જોગર્સ પાર્ક સુધી પહોંચવા માટે ફોર વ્હીલર્સ વાપરી શકતા હોય તેમને માટે એક નાનકડુ ઈલેક્ટ્રીક ટુ વ્હીલર ખરીદવામાં તકલીફ ના પડવી જોઈએ એવું હું સમજું છું.) ટ્રાફિકનો પ્રશ્ન પણ નહીં નડે અને પેટ્રોલ પણ બચી જશે. અને આ બધાની સાથે સાથે તમે વાતાવરણને પણ પ્રદુષણ મુક્ત રાખવામાં તમારો ફાળો આપી શકશો.

ક્યારેય કોઈએ એવું વિચાર્યું છે કે દેશમાં આવા કેટલા વાહનો માત્ર અને માત્ર આવા કામમાં રોજ સવારમાં કેટલું પેટ્રોલ અને કેટલા રૂપિયાનું પેટ્રોલ ખાઈ જાય છે ? જો ખરેખર આંકડો કાઢવામાં આવે તો અ કદાચ તમારા માનવામાં પણ નહીં આવે. મેં ક્યારેય આવો આંકડો કાઢવાનો પ્રયત્ન કર્યો નથી પણ હું યોક્કસપણે માનું છું કે આ આંકડો કદાચ લાખઓમાં નહીં પરુંત કરોડોમાં જશે. જો આ કરોડો રૂપિયાનું પેટ્રોલ આપશે અત્યારથી જ રોજ બચાવવાનું શરું કરીશું તો કદાચ દુનિયામાં બાકી રહેલો પેટ્રોલનો જથ્થો થોડા વધુ વર્ષો સુધી ચાલશે અને આપશી પછીની પેઢીને આપશે વારસામાં થોડુ ઘણું પેટ્રોલ આપીને જઈશું. બાકી જો આમ જ આપશે પેટ્રોલનો વ્યય કરતા રહીશું તો પછી એ દિવસ દૂર નથી કે જ્યારે આપશા પછીની પેઢી માટે તો પેટ્રોલ એક ઈતિહાસના પાને લખેલો શબ્દ બનીને રહી જશે અને કદાચ કોઈ પ્રદર્શનમાં મુકેલી ઐતિહાસિક વસ્તુ બનીને રહી જશે. જેનો જોવા માટે નજીકના ભવિષ્યમાં આપણે રૂપિયા ખર્ચીને મોંઘી ટીકીટો લઈને આપણા બાળકોને આવા પ્રદર્શનોમાં લઈને જવા પડશે.

આજકાલના કોલેજના છોકરા-છોકરીઓને (ખાસ કરીને શ્રીમંતોના નબીરાઓ) જોઈએ તો આપણા મનમાં એમ થયા વગર રહેશે જ નહિ કે પેટ્રોલ ક્યાં મોંઘુ થયું જ છે. કોલેજોમાં મોંઘી દાટ મોટર સાયકલો (જે મોટર સાયકલોની એક લીટરની એવરેજ કદાચ કોઈ જ્ઞેર વ્હીલર જેટલી જ હોય છે) અને કાર લઈને આવે અને બસ અહીંથી ત્યાં અને ત્યાંથી અહીં કરવામાં કરોડો રૂપિયાના પેટ્રોલ મોંઘુ થાય પણ રોજ કેટલી નવી મોટર સાયકલો અને મોટર કાર આર.ટી.ઓ.માંથી રજીસ્ટર થઈને રોડ પર આવી જાય છે. આ વાતનો સરકાર પણ જ્ઞાયદો ઉઠાવીને પેટ્રોલના ભાવો પર કોઈ અંકુશ મુકતી નથી કારણ કે સરકાર પણ જાણે છે કે પેટ્રોલ સોનાના ભાવે પણ વેચાશે તો પણ ક્યારેય એમને ગ્રાહક શોધવા જવા નહી પડે. લોકોને પેટ્રોલ વગર તો ચાલવાનું જ નથી અને લોકો પેટ્રોલ ખરીદવાના જ છે. ભલે માણસ એક વખતનું જમવાનું છોડી દેશે પણ પેટ્રોલ તો વાપરવાનો જ છે. શ્રીમંતો માટે તો જ્ઞેર વ્હીલર લઈને જવું એ એમના મોભાનો સવાલ હોય છે. પણ આ દેશના મોભાની કોઈને પડી નથી. આજકાલના નેતાઓ પણ આ વાત સમજી ગયા છે અને એટલા માટે જ તેઓ પણ આ બાબતે કોઈ કડક પગલા ભરવા નથી

માંગતા કારણ કે નેતાઓ પોતે પણ ધૂમ પેટ્રોલ વાપરે છે અને એ પણ સરકારના ખર્ચે (એટલે કે પ્રજાના પૈસે લહેર કરે છે). આવા ભાવ વધારાથી એક મધ્યમવર્ગનો માનવી કેવી દશામાં આવી ગયો છે એ જોવાની કોઈને પડી છે ખરી ? એક સામાન્ય માનવી કેવી રીતે પોતાનું ઘર ચલાવે છે એ જોવાનો ક્યારેય કોઈ નેતાએ પ્રયત્ન કર્યો છે ખરો ?

એવા ઘણા બધા વિકસિત દેશો છે કે જ્યાં મોટી મોટી કંપનીઓમાં પણ કંઈ નહી તો અઠવાડિયામાં ઓછામાં ઓછો એક દિવસ નો-વ્હીકલ ડે તરીકે રાખવામાં આવે છે કે જ્યારે મોટા મોટા માણસો પણ એ દિવસે પોતાનું વાહન ના વાપરતા ચાલતા કે પછી સાયકલ પર કે પછી સરકારી બસોમાં પ્રવાસ કરીને ઓફિસ જાય છે. આવું જો આપણા જેવા વિકાસશીલ દેશમાં અઠવાડિયે નહિ તો પખવાડિયે અને એ પણ ના બને તો મહિનામાં એક દિવસ જો આ વાતનો અમલ કરવમાં આવે તો પણ કેટલું બધું પેટ્રોલ બચાવી શકાય છે એનો કદાચ ક્યારેય આપણે અંદાજો કાઢયો નથી. પેટ્રોલ કંપનીઓના પેટ્રોલનો વપરાશ ઓછો થશે તો તેઓ પણ પેટ્રોલના ભાવ ઘટાડવા માટે મજબુર થઈ જશે. (અત્યારે આપણે પેટ્રોલ ખરીદવા માટે મજબુર છીએ.) શક્ય હોય એટલો પેટ્રોલ વપરાશ ઓછો કરીશું તો આપણે ખરેખર ધણા બધા રૂપિયા બચાવી શકીશું. અને એથીએ વિશેષ આપણા વાતાવરણમાં થતું પ્રદુષણમાં થતું પ્રદુષણ પણ ઘટાડી સકીશું ને પેટ્રોલ જેવા ખૂબ અગત્યના સ્ત્રોતને વર્ષો સુધી જાળવી શકીશું. ચાલો એકવાર આપણે બધા પ્રયત્ન તો કરી જોઈએ. કદાચ શરૂઆતમાં થોડું અઘરું લાગશે પણ અશક્ય કંઈ જ નથી. પરંતુ જ્યાં સુધી આપણે બધા જાણીએ છીએ. ખરેખર મારી આ વાત પર વિચાર કરીને જોઈ તો જૂઓ. તમને મને આપણને દેશને દૂનિયાને બધાને ફાયદો થશે જ એવી મારી આ લેખિત બાર્હેધરી છે.

મારો આ લેખ વાંચ્યા પછી કોઈ મારી આ વાત સાથે અસહમત હોય એવું મને લાગતું નથી. આ લેખ વાંચ્યા પછી આ વાત પર જેટલા લોકો અમલ કરે તો એના માટે તેઓ મને ઈ-મેઈલ કરીને જણાવી શકે છે. મને એ વાતનો આનંદ થશે કે મારી વાત લોકો સુધી પહોંચી ગઈ.

09

Adulteration of our lives

- **Prof. Pooja Shah** Computer Science and Engineer Dept.

I attended a lecture on food adulteration by Prof. Sanjay Patel and it reminded me of so many adulterations taking place around us. Yes, I remember the day in 2007 very clearly when I got down on the railway platform of Ahmedabad junction to join Nirma. Our "Nirma" was a fascination for a town girl like me. With the dream filled eyes I hired an auto and a journey started. A journey of realization of many life changing events; A journey of knowing myself in a whole different way; A journey which lead to so many answers and a couple of unanswered questions which I will pose in front of the reader. The very first person I met in Ahmedabad was the "autowala". He asked for 50/- for a distance that may cost 25/-. I did not believe him as things are much cheaper at my town. On asking for confirmation in the rate card I found he was just taking a chance to cheat a stranger like me! And that very moment my dream filled eyes got wide opened and alert and they are so till date.

I entered our college and out of thirst I ordered a sweet lemon juice in the canteen. The person making the juice was using pineapple. I prompted that I did not want that. He said it's not for you. And once the glass was ready he served it to me and said have it, sweet lemons are out of stock! Each day that was passing by was teaching me a new way of cheating people, a new way to identify that someone is trying to cheat and then tackle this cheating! Learning to identify cheating instance was a need to survive here efficiently. I was not able to understand why people are so prone to cheating and how can someone cheat others with such an ease. It took me a couple of days to learn that people here are completely money minded. They see only one thing – "Profit". It may be monitory or some other benefit but profit is must. I am not someone from outskirts but am the part of the same society now. I don't understand why we can't see each other as humans and not as a profit? When will we stop thinking about just "our" profit and comfort and start thinking about others'? It's not that the food we consume is adulterated; the entire way the new breed of our race is brought up is adulterated. Our relations, our thoughts, our ideas, dreams, wants, feelings, gains, studies, every single aspect of life is adulterated.

Don't think we are the victims of adulteration, NO! "We" are the inducing elements. Lot many substandard products are sold not only because the producers are money centric but also the consumers are, as they are happy to have cheaper goods.

I was traveling by a bus which was full, no space at all. I got a seat with a lady and a kid. Another lady with a child climbed the bus and the lady sitting beside me told her kid immediately to sit with legs apart so no space on the seat is shown and the lady that just climbed could not ask for sharing the seat. This is what we are teaching our kids and we expect our students to stand up and vacant the seats for us in the bus. This is a case of adulteration of value and principles by which we are bringing up the next generation and this is just one example.

A very famous quote owes to be reminded today. "You will reap what u sow". It's high time to think over what society are we making out! Is this what we want? Is this the environment where we want to spend our lives? Whom are we cheating our own fellowmen, our own children or our own selves?

Generally all my articles end with my favourite line "a lot more to pen". But today while writing the same line I really feel sad. A lot more to pen...

The Entrepreneur in you

- Monica Chhatwani Civil Engineering Dept.

'One who organizes, manages, and assumes the risks of a business or enterprise' – is how the Merriam Webster dictionary defines an entrepreneur. When I dissect and inspect this word in every sense of the word as to what this word means to you, me and to the people who are entrepreneurs, I can come up with a dozen definitions. While I am interested in semantics, I wouldn't bore you with its origin and facts. Let's cut it down to our lives, our times, to a conversation overheard by someone, somewhere...

(Sitting in a lecture hall after class, munching on some wafers in a plastic wrapper, all lights and fans on in the class)

- A: Ohh man! What is this government doing with our country? Isn't it supposed to protect the interests of the people and safeguard them against calamities?
- B: How does it matter to you? What are you talking about?
- C: Don't you read the papers? Don't you know that the global warming has caused the rise in temperature of the world, and if the trend continues, we may have an ice-free arctic by 2040!
- B: Yeah I know that. (Gets up to switch off the lights and fans not required to them)
- A: The industries releasing pollutants in the air should be forced to close down. They release these toxic chemicals into the water and the pollutant gases in the atmosphere. The law should force them to close down. Wonder what they do in those offices!
- C: The law isn't that strict! They don't punish these people..

(To B) Arghh look at you so smart! We're feeling hot in here! Are you going to pay the bills for the fans? Why did you have to switch them off?

- B: But we are 3 people in a full class of a capacity of 60, we hardly need a single fan and light, when all six of them were on! Why waste electricity, it burns coal, which in turn...(trying to make a point to his 'intelligent' friends)
- A: If I would have been in power, I would have got these industrialists at my feet, not allow them to release a single micro-gram of pollutant into the air.
- B: But the damage that we do daily to the environment, that can be avoided! I think that is a more severe crime at this stage for me. Like I said, why keep all the fans and lights on in a room, when you don't need'em! It ain't a matter of money or power guys, understand that its..(again trying to explain, but when sees no change in the discourse of his 'intelligent' friends, he leaves)
- C: What does he know, a freak he is! He can't see the bigger picture. Nothing can be done by us, mere people. We know we are being outdone by the governments, the policies, the systems! They should come and act, make stricter laws. Lets go, time for another class.

A and C leave, throw the wafers' wrapper on the way in the lawn.

Ten years later

A works at a MNC, sits in an air-conditioned office, has a handsome six-figure paycheck. C is still better, works at a food products company, a manger of sorts. Both their companies have thousands of employees, many of whom may or may not have recognition. One day they receive a notice from the pollution control board, requiring them to set up a quick action plan to cut down on their emissions, water and electricity consumption. Now at least they can't blame the government or the law!

Where is the entrepreneur in the story? Well as you should now know, B set out to establish an organization right after college, collecting as many like-minded people as he could, who were willing to work for the betterment of the environment. He conducted surveys, market analysis of best practices, willingness of people and organizations to go green, and filed complaints legally against the wrongdoers. His company made proposals to the board, one of which got approved; the one for which A's and C's company got a notice. He woke up to the cause, and got hundreds of people backing him. He fought. He won. He is in the true sense, an entrepreneur and even more, a social entrepreneur.

As we see, problems are just the beginning for an entrepreneur, not roadblocks at all. Finding solutions is their way of life, not holding the problems. There is a little entrepreneur in each one of us, we just have to have the vision to see what the others don't seem to see! A little faith, with a little action can works wonders for us and for everyone.

So which one of A, B or C are you?



Ferrofluid Magnetic Liquid Technology

Shivam Panwala Chemical Engineering Dept.

A ferrofluid is a stable colloidal suspension of sub-domain magnetic particles in a liquid carrier. The particles, which have an average size of about 100Å (10 nm), are coated with a stabilizing dispersing agent (surfactant) which prevents particle agglomeration even when a strong magnetic field gradient is applied to the ferrofluid. The surfactant must be matched to the carrier type and must overcome the attractive van der Waals and magnetic forces between the particles. The colloid and thermal stabilities, crucial to many applications, are greatly influenced by the choice of the surfactant. A typical ferrofluid may contain by volume 5% magnetic solid, 10% surfactant and 85% carrier.

Magnetic Behavior of Ferrofluid

In the absence of a magnetic field, the magnetic moments of the particles are randomly distributed and the fluid has no net magnetization.

When a magnetic field is applied to a ferrofluid, the magnetic moments of the particles orient along the field lines almost instantly. The magnetization of the ferrofluid responds immediately to the changes in the applied magnetic field and when the applied field is removed, the moments randomize quickly.

In a gradient field the whole fluid responds as a homogeneous magnetic liquid which moves to the region of highest flux. This means that ferrofluids can be precisely positioned and controlled by an external magnetic field. The forces holding the magnetic fluid in place are proportional to the gradient of the external field and the magnetization value of the fluid. This means that the retention force of a Ferrofluid can be adjusted by changing either the magnetization of the fluid or the magnetic field in the region.

Ferrofluid Properties and Their Application

Ferrofluid is designed as a component of a device and therefore it must meet specific performance objectives of the device. The selection of ferrofluid depends on many factors such as environments, operating life, etc. There are many different combinations of saturation magnetization and viscosity resulting in a ferrofluid suitable for every application.

The performance and operating life of a product that uses ferrofluid can be significantly affected by the characteristics of the ferrofluid. From ferrofluids with low evaporation rate or vapor pressure to ferrofluids with viscosity-optimized products, the characteristics of ferrofluid can dramatically shape the capabilities of the end product.

Thermal conductivity of a ferrofluid depends linearly on the solid loading. Fluorocarbon based ferrofluids have the lowest thermal conductivity of all commercial ferrofluids, therefore they are the least desirable materials for heat transfer applications.

In devices, ferrofluids come in contact with a wide variety of materials. It is necessary to ensure that ferrofluids are chemically compatible with these materials. The fluids may be exposed to hostile gases,

such as in the semiconductor and laser industries; to liquid sprays in machine tool and aircraft industries; to lubricant vapors in the computer industry; and to various adhesives in the speaker industry. Furthermore, ferrofluids may be in contact with various types of plastics and plating materials. The surface morphology can also affect the behavior of the fluid. The selection of ferrofluid is carefully engineered to meet application requirements.

Additionally, ferrofluids may be expected to perform at temperature of 150°C continuously or 200°C intermittently, in winter conditions (-20°C) and space environments (-55°C). They may also be required to withstand nuclear radiation without breakdown.

Characteristics of Ferrofluid that Affect Performance

The thermal stability of a ferrofluid is related to particle density. The particles appear to behave like a catalyst and produce free radicals, which lead to cross linking of molecular chains and eventual congealing of the fluid. Catalytic activity is higher at elevated temperatures and, therefore, ferrofluids congeal more rapidly at these temperatures.

High magnetization ferrofluids are of interest as they produce volumetric efficiencies of magnetic circuit designs leading to lightweight and lower cost products. They can also be used to reduce reluctance of magnetic circuits and fringing field thus increasing useful flux density in the air gap. The domain magnetization of magnetite ultimately limits the maximum magnetization value that can be realized in a ferrofluid.

Ferrofluid Today

As the worldwide leader in the production of ferrofluid, we can say that ferrofluids are a unique class of material. Ferrofluid technology is well established and capable of solving a wide variety of technical problems. There are many successful applications of this engineering material and there is immense future potential.

In many applications, ferrofluid is an active component that contributes towards the enhanced performance of the device. These devices are either mechanical (e.g., seals, bearings and dampers) or electromechanical (e.g., loudspeakers, stepper motors and sensors) in nature. In other cases, ferrofluid is employed simply as a material for non-destructive testing of other components such as magnetic tapes, stainless steels and turbine blades. When correctly applied, Ferrofluid can produce dramatic improvements in a products' performance; or achieve a level of performance unattainable by any other technology or product.

Ferrotec Corporation (formerly Ferrofluidics) has led the development of Ferrofluidic technology since 1968 and has worked closely with many companies as their new product teams incorporate ferrofluids in next-generation products. With a comprehensive fluid development and applications laboratories in both the US and Japan, and an experienced staff of scientists and engineers available to assist you, Ferrotec is well placed to help you solve your engineering challenges using ferrofluid.

Graph Search: A New Search Engine By Facebook

- Dhruvin Patel Electrical Engineering Dept.

Recently, Facebook has launched a new search engine called Facebook Graph Search. Facebook Graph Search will use Facebook's massive index of data from its 1 billion users to provide personalised search results - data that is completely unavailable to Google. It was the "third pillar" of the Facebook product strategy, joining the News Feed and Timeline profiles. Despite Mark Zuckerberg's assertion that "Graph Search is not web search," it's clear that Google should be very worried. Graph Search is designed to give you the answer rather than leading you to a series of links to potential answers. When there's no answer to be gained from your own connections and uploaded material, Bing integration will return more traditional web search results. Graph Search is not as extensive as web search and is generally limited to the size of your network of friends. The more friends you have, the better the experience gets, particularly if they are active Facebook users. But Facebook has also used its partnership with Microsoft to bake the Bing search engine into Graph Search.

Your typical search on Graph Search, however, will adopt a far more naturalistic approach than what you might be used to. Imagine you're about to visit a city on your holidays - let's say Ahmedabad- and you wanted to see images of the place from contacts who have visited, you could type in "photos of my friends in Ahmedabad" and Graph Search would understand precisely what you're requesting. The responses will be listed in the order of those contacts that are closest to you - your immediate circle of friends and family at the top. "Photos of dhruvin and manasi" is another useful example of how Graph Search will enhance your everyday Facebook experience, pulling together all of the pictures tagged with dhruvin and manasi with a simple ten word search.

Then there's the problem of trust. Over the past nine years, Facebook has had its share of privacy flaps. Last year, it finalized a settlement with regulators that will subject it to privacy audits for the next two decades. For its search tool, Facebook has tried to blunt privacy concerns early and announced plans to remind users to review what idea they share. The company says users will only be able to search for data they already have access to.

Graph search will make it incredibly easy for people to immediately retrieve information about their friends. Users may not feel comfortable that co-workers can find their college photo with one click, instead of four or five clicks. In practice, obfuscation can be a form of privacy.

Let's see how it sticks up for us!!!!

BARCODES

- Prof. Harsh Kapadia (IC Department)

We See Barcodes every day in our life whether it is on the Shampoo pouch or any Electronic Gadget. Nowadays we often see a square barcode in new paper advertisement which contains some square dots. Barcodes are introduced in 1960s. First of all a barcode is a machine readable code of a series of bars and spaces printed in defined ratios, whose principle function is to convey data. Their first application was in rail road cars. The invention of barcode was a result of developing an application for identifying products of all kinds, especially in super markets. Today barcodes are almost everywhere and popular in consumer products. They help automate the process of production and reduce human error. Simply barcodes are formed of parallel lines which may be thick or thin depending on the data encoded in the code. Automatic Identification eliminates two error prone and time consuming activities – manual data collection and data entry. Applications are Optical Character Recognition (OCR), magnetic stripe, Radio Frequency Identification (RF/ID), smart cards, Biometric ID, Electronic Data Interchange (EDI), barcodes etc.



Figure: Sample EAN-13

There are almost dozens of barcodes currently in use such as code-11, UPC A, UPC E, EAN-2, EAN-5, EAN-8, EAN-13, JAN, QR, PDF417, Data Matrix, stacked barcode. This EAN-13 is the barcode which is generally seen on books (starting 3 digits are 978).

COUNTRY	EAN-13 (first 3 digits)
USA & CANADA	00-13
INDIA	890
GERMANY	40-44
JAPAN (JAN-13)	49 OR 45
International Standard Book Numbering (ISBN)	978
International Standard Music Number (ISMN)	979
International Standard Serial Number for Periodicals (ISSN)	977
FRANCE	30-37

EAN international manages a worldwide system that allows the identification and communication of the data on products, services, and utilities transport units and locations. Barcode find use where one needs to identify or track something, for example it can be helpful in a hospital. A wrist band of paper containing barcode tied on patient's hand. It can be scanned and data information of the patient will be available. Likewise in a supermarket products can be scanned using a laser barcode reader. There can be number of applications where barcode can be used. Many types of barcode scanners are available in market and are used. The most common of them is the hand held laser scanner which is seen in any super market. Other readers are CCD, camera, and mostly used nowadays is the mobile phone camera.

Barcodes are a pattern of bars and spaces of varying width that represent digits, letters, or other punctuation marks or symbols. The way the bars and spaces are arranged is called a symbology. All barcodes can be broadly divided into three categories: Linear, Stacked, Matrix. The Barcodes you generally find nowadays in newspaper advertisement are QR barcode. Matrix symbologies are regular polygon arrays of data cells, plus 'finder' and orientation structures that typically are read from 2D images from a CCD array. Matrix Code barcode include –Data Matrix and MaxiCode, Dot Code A, QR Code etc.

Among 2D symbologies there are two distinct flavours. 'Stacked' 2D symbols are composed of multiple 1D row and are fully decidable from multiple linear scan paths through the symbol in approximate alignment with its rows. 'Matrix' 2D symbols, on the other hand, are composed of a grid arrangement of light and dark modules, like a checkerboard, and require a 2D camera or image-based reader. In general, 2D matrix symbols for the same data, and image readers read all symbols in any orientation; laser scanning for stacked symbols, in comparison, is a more mature reading technology.

QR Code is a two-dimensional symbol. It was invented in 1994 by Denso, one of major Toyota group companies, and approved as an ISO international standard (ISO/IEC18004) in June 2000. This twodimensional symbol was initially intended for use in production control of automotive parts, but it has become widespread in other fields. Now QR Code is seen and used every day everywhere in Japan and elsewhere for the following reasons:

- a) Several characteristics superior to linear bar codes: much higher data density, support Kanji/Chinese character, etc.
- b) It can be used by anybody free of charge as Denso has released the patent into the public domain.
- c) Data structure standard is not prerequisite for current usages.
- d) Most mobile phones in Japan equipped with cameras that enable reading of QR Codes can access Internet addresses automatically by simply reading a URL encoded in the QR Code.



Figure 2 QR Code

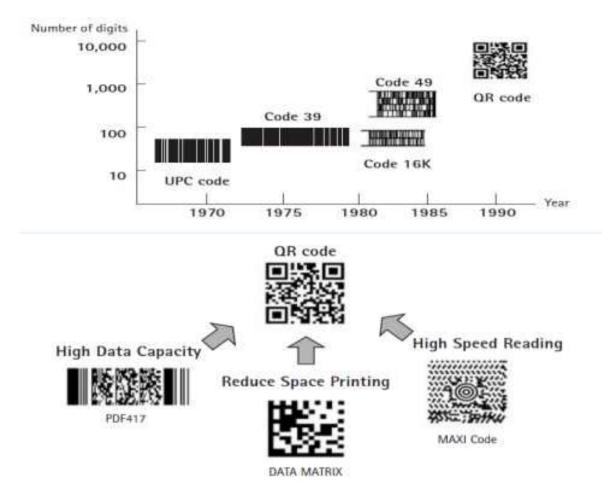
2D code or matrix code is simply a two-dimensional way to represent information similar to linear codes, but can represent more information per unit area. Some of the 2D barcode names are 3-DI, Aztec Code (also Small Aztec Code), Codablock (Stacked 1D barcodes), Code 16K (Based on 1D code 128), Colorcode, Data Matrix, Dot Code A, MaxiCode (Used by United Parcel Service), PDF417, QR Code, SuperCode, WaterCode.

QR (Quick Response) Code is a two-dimensional symbol. It was invented in 1994 by Denso, one of major Toyota group companies, and approved as an ISO international standard (ISO/IEC18004) in June 2000. This two-dimensional symbol was initially intended for use in production control of automotive parts, but it has become widespread in other fields. Now QR Code is seen and used every day everywhere in Japan and elsewhere for the following reasons:

- e) Several characteristics superior to linear bar codes: much higher data density, support Kanji/Chinese character, etc.
- f) It can be used by anybody free of charge as Denso has released the patent into the public domain.
- g) Data structure standard is not prerequisite for current usages.
- h) Most mobile phones in Japan equipped with cameras that enable reading of QR Codes can access Internet addresses automatically by simply reading a URL encoded in the QR Code.



Data can be translated into a QR code by any QR generator, many of which are available free online. Users simply enter the data to be translated, and the generator produces the code, which can then be displayed electronically or in printed format. Decoding the infor¬mation can be done with any mobile camera phone that has a QR reader, which is freely available online for most devices. Once the software is loaded, a user points the cell phone camera toward the code and scans it. The software interprets the code, and the cell phone will either display the text or ask for permission to launch a browser to display the specified web page. Below figure shows the history of barcodes and it shows the number of digits which can be encoded in a QR code is highest amongst all other barcodes. Additional to the characteristics for two-dimensional symbols such as large volume data (7,089 numerical characters at maximum), high-density recording (approx. 100 times higher in density than linear symbols), and high-speed reading.



QR Code has other superiority in both performance and functionalities aspects.

- a) All-Direction (360°) High-Speed Reading :
- b) Resistant to distorted symbols
- c) Data Restoration Functionality (Resistant to Smudged or Damaged Symbols)
- d) Efficiently Encoding of Kanji and Kana Characters
- e) Linking Functionality of the Symbols
- f) Masking Process
- g) The Confidentiality of the Code
- h) Direct Marking

Barcodes have found widespread use in applications as diverse as in the airline industry, animal husbandry, automotive industry, banking, defence, distribution, electronic industry, furniture industry, food packaging industry, forensic, government agencies, health care, highway agencies, libraries, manufacturing, mines, pharmaceutical industry, personal identification systems such as identity cards, access cards, passports, retail outlets, telecommunication industry, video rentals, wall paper industry, and warehousing. Even NASA has found barcodes as a reliable and useful identification technology for space applications. The US internet Postal Services uses 2D stacked barcode to identify user, the value of stamp used, etc.

Earthtronics Wind Turbine Generates Electricity Even in Low Wind Speeds

Interface

- Shivam Panwala Chemical Engineering Dept.

EarthTronics has developed a small-scale wind turbine that could be used to generate electricity at home in winds as low as two miles per hour. The company is calling it "the highest output, lowest cost per [kilowatt hour] installed turbine ever made."

Even with growing interest in wind power worldwide, the U.S. market for home wind turbines remains small, less than 0.002 percent of the national market. According to the American Wind Energy Association (AWEA), however, this small wind turbine market is expected to grow dramatically over the next four years - from a total of 80 installed megawatts in 2008 to 1,700 megawatts in 2013. Already, installations in 2008 - 17.3 megawatts - marked a 78 percent increase over 2007. Small wind turbines produce 100 kilowatts or less of power.

Perhaps more significant, however, are the new technologies making home-scale wind turbines more practical, affordable and visually attractive. Whether the new technologies will be enough to overcome resistance from neighbours or the still substantial start-up costs, however, remains to be seen.

One of the primary challenges in producing home-scale wind turbines has been figuring out a way to generate electricity from low wind speeds. In urban and suburban settings, a high density of nearby buildings and trees tends to block the higher wind speeds needed by conventional turbines. According to Earthtronics, 90 percent of the wind resources in North America are nine miles per hour or lower.

Shaped like a giant wheel, the Earthtronics home wind turbine is significantly lighter than a conventional turbine due to its omission of a gearbox in the center.

Traditional turbines are turned when the wind pushes against large blades around a central gearbox, which in turn generates the electricity. Because the gearbox is so heavy, however, large blades and high winds are required for it to operate. The gearbox has been replaced by a much lighter "direct-drive generator" based on magnets. This allows the turbine to generate electricity in winds anywhere between two and 45 miles per hour. Also in contrast to other turbines which must be mounted on the ground the Honeywell turbine can be attached to a rooftop.

The turbines have a six-foot diameter and weigh 95 pounds. The company has begun a program to train contractors and electricians in how to install the devices.

EarthTronics is not the only company taking advantage of direct-drive generators to jump on the home wind power bandwagon. According to the AWEA, a number of other companies are also planning to introduce building-mounted wind turbine systems, such as London-based Quiet Revolution. Private companies such as Mariah Power and Wind Energy have also invested in small-scale wind turbine technology, and Siemens has begun testing turbines without gearboxes to see if they could be adapted for larger-scale electric generation.

Accidental inventions which changed the world..!

- Vivek Brahmbhatt Electrical Engineering Dept.

The 'Eureka!' moment of the inventors--this article is going to acquaint you with--was purely accidental, and those indeed proved much useful make life of man easier. The story responsible for getting the 'click' in brains of these people is quite interesting as well as worth knowing. So, here is the account of some fantastic accidental inventions.

1: Laminated Glass

Interface

Édouard Bénédictus (1878-1930) was a French painter, composer, writer and chemist. The year was 1903. The chemist was on some chemical experiments. God knows what those experiments of were, but a mishandling of a flask made him famous for this invention. He accidently dropped a flask on the floor, and to his surprise, the broken glass didn't scatter on the floor in small pieces, but instead remained in distinct pieces (much easier to cleanup). Bénédictus didn't took much time to make out that this was due to the dried layer of celluloid liquid which retained on inner side of flask, which was like transparent plastic layer. As a result laminated glass was invented and he registered patent rights for the same. This type of glass was first used as windscreen in car by Swedish company Volvo in its model P.V.44, and now each windscreen you see is made of laminated glass only.

2: Microwave oven

The year was 1942. Percy Spencer, an American radar engineer was testing his new radar, which was his daily job. But, that day it so happened that the chocolate bar he kept in his upper pocket start melting. That definitely did get his shirt dirty, but also led him to a 'click' in his brain that that was due to the heat of the microwaves which 'cooked' his chocolate. Later he tried putting a bowl of corn in front of magnetron tube, and it started popping up as popcorn! He invented the microwave oven, and registered its patent too. The first microwave oven for kitchen was made in 1952.

3: Velcro

A Swiss Electrical engineer George de Mestral returned home after a good walk in woods with his dog. He observed a fascinating thing that cockleburs' ability to cling to his clothes and his dog's fur was appreciable. (Cocklebur is a flowering plant native to America and eastern Asia) Under microscope, he examined tons of tiny hooks that line cockleburs and discovered they could easily attach to the small loops found in clothing and fur. He experimented with different materials to make his own hooks and loops form a stronger bond. In 1955, De Mestral decided nylon was perfect and thus Velcro was invented. Velcro wasn't widely used until NASA made it popular in the early 1960s. Apollo astronauts used it to secure items that they didn't want escaping in their zero-gravity environment. Hospitals and athletic companies eventually used Velcro after realizing the practicality of the material. In 1968, Puma was the first to use Velcro on shoes – Adidas, Reebok, and others followed suit.

4: Potato chips

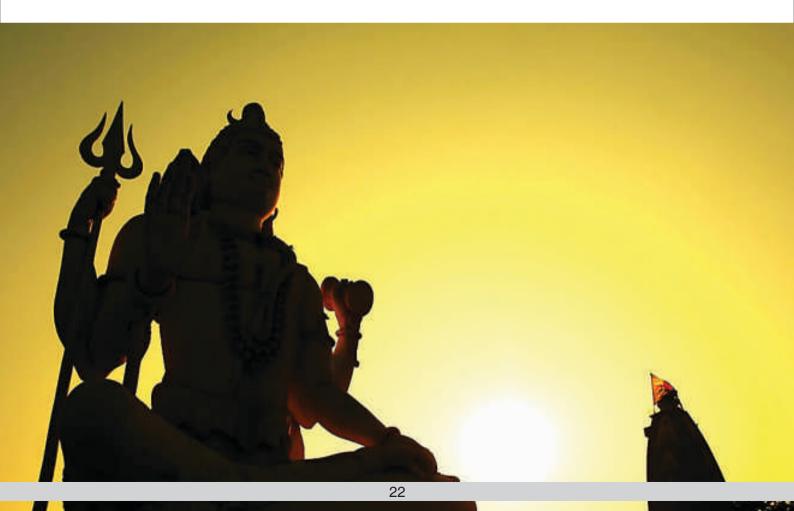
Considering potato chips as an invention may seem odd, but the story behind is equally weird! It is said that one fine day in 1853, a customer (many identify him as Cornelius Vanderbilt), went to a restaurant in Saratoga, New York for dinner. He refused to eat the fries served to him as they were too thick and

soggy. When several plates were returned, the chef George Crum sent out thin, fried slices of potatoes (obviously, being frustrated!) who found them to be a tasty treat. Others wanted to try the new dish and soon 'Saratoga Chips' were added to the menu. And the rest we know is history.

5: Plastic

It is definitely possible that you can spot out at least a dozen of plastic items in front of you, without turning your head. But the inventor, Leo Baekeland, a Belgian-born chemist did not intend to dominate your view site with his creation. He was instead looking for a replacement for shellac, a resin secreted by a bug. Baekeland's 'Novolak', a combination of formaldehyde and phenol – an acid extracted from coal tar – failed to catch on as a shellac substitute. But he noticed that by controlling the temperature and pressure applied to the two compounds (using a massive iron cooker that he called bakelizer) and by mixing it with wood flour, asbestos, or slate dust, he had created a material that was mouldable yet robust as well as non-conductive and heat-resistant. He called his invention Bakelite, and referred to it as 'the material of thousand uses', and the number has turned to millions now.

And many more inventions like penicillin, anaesthesia, corn-flakes, X-rays (most well-known story), Teflon, vulcanised rubber, ice cream cone, were of similar kind. Most inventors strive for weeks, months, or years to perfect their products. (Thomas Edison tried thousands of different light bulb filaments before arriving at the ideal mixture of tungsten) But sometimes, brilliance strikes by accident. And so these people who stumbled upon greatness, and more importantly, shared their mistakes with the world surely deserve a salute.



Biological Chemical Tragedy

- Panchami Patel Chemical Engineering Dept.

It all started in the science lab

as I stood there unaware

of the fact that mixing hydrogen and carbon monoxide

gives water gas.

The teacher must have guessed my absence of mind

and asked me what water gas was?

I stood there perplexed

not knowing anything about water gas

except water was water and gas was well - gas.

I stood there my head lowered in mock shame

while my classmates shrewdly laughed around me

I tried to hide my smile

but was unable to do so.

That was how I found myself in the science lab after hours

with the teacher and the 12 grade science class

watching a practical demonstration of how water gas was formed

and I concluded that water was for all purposes water

but water gas was the mixture of hydrogen and carbon monoxide.

Some memory of that experiment carried me forward

to tick the box near science on my 12th grade form

and later the chemical box on my engineering form.

today I am sitting in a class of 75

trying to understand why it was necessary to plot a P-x-y diagram to find the VLE data

and why gamma couldn't just stay 1 to lessen my worries?

Why robots couldn't just control systems themselves

instead of humans being taught regulator problems?

Why interacting series and non-interacting series had such complex formulae

and time constants which couldn't be just the same?

Why A B C which we were taught when we were five

now had different meanings in different subjects?

sometimes A was amplitude or Antoine's constant

or a system specific constant.

Why packing in towers had weird names like saddle

isn't saddle something you put on a horse and why on the earth do towers weep?

Thermometers were something I only used when I thought I had fever, which I never did have

but nowadays I use thermometers constantly

and have dreams of thermometers dancing in a water bath!

And now I feel I should have let water gas be just water gas,

or maybe it was just an innocent mixture of hydrogen and carbon monoxide.

Because of that water gas

Institute of Technology, Nirma University

<u>Interface</u>

દોસ્તી

- Viral Parekh (09BCE034)

નબળી પળોમાં એક આધાર આ દોસ્તી, રડતી આંખોમાં ખીલખીલાટ આ દોસ્તી, અંગત વાતો કરવા Diary ! આ દોસ્તી, sms નો રણકતો ringtone આ દોસ્તી, ખંભા પર આશ્વાસનનો હાથ આ દોસ્તી, ઈશારાથી સમજાઈ જતી વાત આ દોસ્તી, પ્રેમનું પરિપકવ સ્વરૂપ આ દોસ્તી, સમયાતંરે મીઠો ઝગડો આ દોસ્તી, m sorry થી થતી સુલેહ આ દોસ્તી, અહંથી મોટો વિશ્વાસ આ દોસ્તી, જીવન જીવવા માટેનું એક કારણ આ દોસ્તી.

Live Astray

- Ashish Manik Civil Engineering Dept.

In Mother's lap, Flowing through a nap –

> Jumping She came 'Life' be her name. She gave Me Love, She spread My Fame.

She showered My Desires In the Rain. So close She played, No stress, no pain.

Twisted, twisted Me Around My Aim. So Beautiful She – So early She came!

Thud, thud I fall; Was it a Dream? Nay, not at all. How Blessed – I lived!

But now I know, She played the game, To awaken Me, Yes, early She came.

She left Me bare Down in the Folk, Who do scare Astray You spoke!

Up, up She stays, With a desperate gaze For someone in the Folk Who knows the ways –

Truth, Honesty be the main. Knowledge n' Insight – what a gain!

So the Fruits I eat That they refrain; As to 'Go astray' Is the right game –

For twisted, twisted She Around My name!

Holiday

-Ashish Manik Civil Engineering Dept.

Here cometh the Holiday, With nasty exams not away. Me not jumpy if they slay, Creme de la creme is to play-Playful is Me in the Holiday.

Personal Vibes: Aura Within and Without

-Bhasha Maroo Electronics & Communication Dept.

Before beginning the article, I would like to put forward an interesting question," Has any one of you ever tried talking to your mobile phone??" Yeah, yeah, it may sound comic, but this question is going to lead to a conclusion worth thinking. Have you ever felt that your phone works in a normal way when you are happy and gets hanged and slow when you are irritated and angry?? Talk to your plants while watering them, you will see the difference. Cleaning and taking care of your vehicle as if it was your best friend, it will never let you down. Greeting a cheery hi to your room when you get back home after a tiring day, it will make you feel relaxed and relieve you of tiredness. Going back to the example of phone, I myself have experienced that while sharing photos and songs with my friends, our phones accepts the request only if we are doing it willingly, otherwise it rejects it, wierd, isn't it? Does it mean that non living things have feelings? Does it mean that they react and respond like we humans do? Well that's definitely not true. The reason behind this is the theme of my article.

Each and every living being on earth constantly emits radiations which we, in normal terminology, call vibrations or simply vibes. And this is the reason due to which we feel that the non living things respond to us, yes they do, they respond to our vibes. Imagine if the vibes affect the inanimate objects this much, what a major role it would be playing towards the living beings surrounding us?

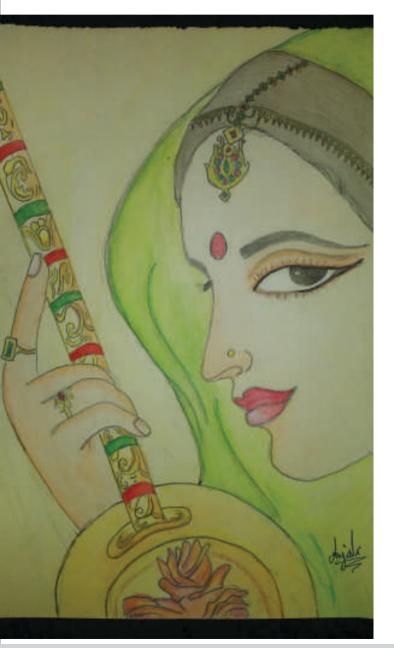
We often find people saying, "I get negative vibes from this person" or "I get positive happy vibes from this place." You also must have experienced this. So, what we feel about each other is a vibe. But has one ever gone down to the core of this vibe or feeling? This little word is what changes our outer world for the better or for the worse. Just as the sound you create while strumming a guitar, spreading everywhere gradually, in the same way, every thought going on in our mind spreads everywhere. Emotional vibes are obvious-as in you can feel each other's anger, fear or love when in physical proximity. Humans are all connected by a psychic web- a network of invisible vibes. Drop a pebble in the calm, still waters of a water body sometimes, ripples will immediately start to form. A little thought dropped in mind creates an outburst of so many waves going out and touching everything that comes within its range.

When we are peaceful from within, we emit peaceful vibes and when we are angry, we emit disturbed vibes. This is what others around you pick up and their response to you will be according to what they feel about your vibes. What a disturbed person would radiate would not only affect the immediate environment but also the surrounding atmosphere. We all must have experienced for sure that sometimes we feel angry, sad and lonely with just no reason right? Well maybe because we are in an atmosphere with negative vibes. These days we can see our campus tensed and busy because of the submissions and the exam atmosphere, but the same campus was utmost vibrant and colourful during February when NU Tech and Horizon were organized. This is due to the difference in vibes emanating from us.

To be able to send the right vibes, one needs to cultivate the qualities of being calm and focused first within oneself. We must spread peace in the house if our younger sibling is studying or when we are in a hospital with suffering patients. All we can do to spread positive vibes is to keep a control over our anger, frustration and mood changes by practicing calming exercises. People said that many years ago,

lord Mahavir had such powerful an aura that when he passed through a forest, all the wild animals in the range of 100 km would turn peaceful and sit silently. Amazing ,isn't it? We of course, cannot be like him, but at our level, all we can do is not to hurt others by our words or thoughts, because even if we do not speak, our thoughts affect not only the living but also the nonliving things surrounding us.

Try to be ever smiling and keep an innocent, honest, and pure heart. If love is the need, make your inner core a lovable one, such that every person around you feels happy when you are around, because what you think, is what you do. In the end, I would like to sum it up with a beautiful universal truth-OUR LIVES ARE, BUT A PROJECTION, OF OUR OWN VIBRATIONS....So go on, and change the world, with your vibes.





REPORT

Awards

First Runner-up of National Robotic Competition ROBOCON

The National Robotic competition, ROBOCON-2012 was organized during March 1-3 2012 at Maharashtra Academy of Engineering (MAE), Pune. Total 68 teams participated in this national competition. Institute of Technology, Nirma University has been awarded the First Runner Up in this prestigious event.

SAE Baja Automobile Design Competition

An All Terrain Vehicle (ATV) was designed and fabricated by Team STALLIONS, students of Mechanical Engineering students for participating in a National level competition BAJA SAE India 2012 Event organized by Society of Automotive Engineers (SAE), India at Pithampur, Indore, M.P. in February 2012. The Team has been awarded the first prize for 'Best Technology Innovation' and won a Cash Award of Rs.2 lac.

Earthian Face OFF Challenge

Team of III semester students of Chemical Engineering Department of Institute of Technology, Nirma University have been awarded the first prize for 'Earthian Face OFF Challenge" organized by Wipro at National level. The "Earthian Sustainability program for schools and colleges". The nationwide event aimed to promote the importance of sustainability amongst youngsters and encourage them to be a part of the process.

Best CSI Student Branch Award

The CSI Student Branch of our Institute has received the Best Student Branch Award by Computer Society of India for the year 2011

Report : ISTE Faculty Chapter

ISTE Awards

- 1. An Expert Lecture on "Stress Management" was delivered by Swami Vivek Jiwandasaji, under ISTE Faculty Chapter on 28th January, 2012.
- An Expert Lecture series on "Inculcating Academic Administration" was delivered by various experts from the Nirma University the details are as under:
- 2. An Expert Lecture on "Game Theory" was delivered by Prof. A. S. Ranade, HOD EE, EC & IC Dept. under ISTE Faculty Chapter on 27th February, 2012
- 3. An Expert Lecture on "Academic Rules & Regulation" was delivered by Prof. U. A. Patel, Exam Coordinator under ISTE Faculty Chapter on 28th February, 2012.

- 4. An Expert Lecture on "DACUM Development" was delivered by Prof. V. R. Iyer, Principal Institute of Diploma Studies under ISTE Faculty Chapter on 29th February, 2012
- An Expert Lecture on "Inculcating Research Attitude" was delivered by Dr K Kotecha, Director, Institute of Technology, Dr. P. N. Tekwani, Professor & Dr. Dhaval Pujara, Professor under ISTE Faculty Chapter on 1st March, 2012.
- 6. An Expert Lecture on "Development of Higher Education in India after Independence, Challenges ahead, Role of Teachers in developing and sustaining quality" was delivered by Shri D. P.Chhaya, Executive Registrar, Nirma University under ISTE Faculty Chapter on 2nd March, 2012.

- An Expert Lecture on "RTI for Effective Governance" was delivered by Dr. Purvi Pokhariyal, Director, Institute of Law, Nirma University under ISTE Faculty Chapter on 3rd March, 2012.
- 8. ISTE Entrepreneurship Awareness Camp for Students (EACS) was conducted from 26th March to 28th March 2012. This workshop was coordinated by Prof. Madhuri Bhavsar.

• The Institute successfully organized 2nd International Conference on "Current Trends in Technology 'NUiCONE 2011' during 8-10 December 2011. More than 250 research papers were presented and more than 700 participants attended the conference.

Various activities were conducted under ISTE Faculty Chapter at Institute of Technology, which are mentioned here below:

Sr. No.	Programme Title	Type of Programme (Self Finance / Sponsored)	Duration	Name of the Coordinator	Departm ent	Total No. Particip ants
1	Refresher Course on Computation and Simulation in Chemical Engineering	Self Finance	2-07-2012 to 14-07-2012	Dr.A.P Vyas & Dr. D. H. Joshipura	Chemical	13
2	Applications of Geoinformatics for Infrastructure Project Development and Management	Self Finance	2-07-2012 to 13-07-2012	Dr.Parul R. Patel & Prof. Ketan Lakhataria	Civil	8
3	Advances in High Performance, Autonomic and Cloud Computing	Self Financed	2-07-2012 to 14-07-2012	Dr. Sanjay Garg & Dr.Madhuri Bhavsar	CSE	27
4	Advances in Electronics & Communication Engineering	Self Finance	2-07-2012 to 14-07-2012	Dr. D. K. Kothari & Dr. Dhaval Pujara	EC	24
5	Advances in Power Engineering - Technology & Tools	Self Finance	2-07-2012 to 14-07-2012	Prof. P. N. Kapil & Prof. C. B. Bhatt	EE	29
6	Advances in Control and Automation	Self Finance	2-07-2012 to 14-07-2012	Prof. D. M. Adhyaru & Prof. J. B. Patel	IC	12
7	Advances in Mechanical Engineering	Self Finance	2-07-2012 to 14-07-2012	Dr. D. S. Sharma & Dr. K. M. Patel	Mechanic al	21

Details of STTPs conducted In Instutute of Technology Year 2012

Report : Paper presented / published in conference/ journal

BOOKS PUBLISHED:

• Prof. Pooja Shah has got a book published on "VANET – An Illustrative Introduction to Vehicular Ad-hoc NETworks and Its Applications", LAP LAMBERT Academic Publishing, Germany.

Sr. No.	Name of the Faculty Member	Name of the Book	Name of the Publisher	Month & Year of Publication
1.	Parin D Shah Dipti Gilani M.S.	Bioremediation of industrial wastewater- Sustainable pollution abatement technology(ISBN 978-3- 8484-0394-3)	Lambert Academic Publishing, Saarbrücken - Germany	2012
2.	Prof.(Ms) Femina J. Patel & Dr. Sanjay S. Patel	Automotive Emissions and its control-Pollutant formation and advance control technology	Lambert Academic Publishing, Saarbrücken - Germany	2012
3.	Dr. Ankur H. Dwivedi	"Photochemical Degradation of Halo- Organic Compounds"	LAMBERT Academic Publishing (LAP) GmbH & Co. KG, Saarbrücken, Germany(2012). (ISBN : 978-3-8484- 8285-6).	April 2012
4	Dr Ankur Dwivedi and Dr Shibu G. Pillai	Spectrophometric Trace Analysis of Transition Metal Ions	Lambert Academic Publishing, Saarbrücken – Germany	August 2012
5	Dr A P Vyas	Biodiesel production and test on diesel engine: Emission analysis using biodiesel on diesel engine	Lambert Academic Publishing, Saarbrücken – Germany	September 2012
6	Dr Ankur Dwivedi	Chemical Engineering & Chemistry	Lambert Academic Publishing, Saarbrücken – Germany	September 2012
7	Dr. Usha Mehta	Code Based Data Compression: Optimization of Time, Power and Area for SoC Testing	Lambert Academic Publications	1-Apr

8	Dr. N. M. Devashrayee	Design of CMOS Low Power Holding and Interplating ADC	Lambert Academic Publications	1-Apr
9	Prof. H.K. Patel	Cookbook for Multiple output flyback converter using Top-switch: Most Versatile Technique for Multiple Output SMPS	LAP LAMBERT Academic Publishing	
10	Prof. H.K. Patel	Electronic Nose: Introduction,Sensor and Application	LAP LAMBERT Academic Publishing	
11	Prof. H.K. Patel	Introduction to Odour Measurement and Odour sensors: Fundamentals of Odour Measurement	LAP LAMBERT Academic Publishing, Germany, ISBN- 10: 3659197904 ISBN-13: 978- 3659197901	
12	Prof. H. K. Patel , Rahul Kaushik and Yusuf Ali Bohra	Sensor Network Design & Temperature Measurement for Surface Analysis: Fundamentals of Sensor Network, Design & Optimization	LAP LAMBERT Academic Publishing, Germany, ISBN- 10: 3659261904 ISBN-13: 978- 3659261909	

Papers (Presented / Published) by the faculty members in Seminars / Conferences / Journals:

- S. V. Pandey published a paper entitled "Improved gain and Bandwidth of L-slot Loaded RMSA on Different Thickness for Wireless Communication", in International Conference on Information, Computing and Telecommunications (ICICT-2012) at Delhi during April 1-2, 2012
- S. V. Pandey published a paper entitled "Design of a Modified E-shaped Dual band", in International Conference on Communication Systems and Network Technologies (CSNT-2012) at Rajkot during May 11-13, 2012
- Usha Mehta published a paper entitled "Improved Error Resilience for Huffman Compression for Hamming Code Based Technique", at IEEE & IISC Bangalore during June, 2012

- S. H. Gajjar published a paper entitled "Performance Analysis of Cross Layer Protocols for Wireless Sensor Networks", in International Conference on Advances in Computing and Communication and Informatics at RMK Engineering College, Chennai during August 03-05, 2012
- Dhaval Shah published a paper entitled "Study of BER performances of various atmospheric channel models for free space optical communication optical communication" at Delhi during August 12-13, 2012
- Aarti Gehani and Dhaval Pujara published a paper entitled "Analysis of an Elliptical Patch Antenna Using Artificial Neural Networks", at Asia Pacific Conference on Antennas &

Propagation, Singapore during August 27-29, 2012.

Interface

- Dhaval Pujara published a paper entitled "Analysis and Synthesis of Microstrip Patch Antenna using Artificial Neural Networks", at Asia Pacific Conference on Antennas & Propagation Singapore during August 27-29, 2012.
- Chetna Chauhan published a paper entitled "Innovative Materials, Processes, Products and Applications", at International Conference on Nanotechnology, Bharti Vidyapeeth University, Pune during October 18-19, 2012.
- Manisha Upadhyay and Dilip Kothari published a paper entitled "Power minimization algorithm for multi-source multi-relay cooperative wireless network", at NUiCONE, Nirma University during December 06-08, 2012.
- Sachin Gajjar published a paper entitled "Lifetime Improvement of LEACH Protocol for Wireless Sensor Network", at NUiCONE, Nirma University during December 06-08, 2012.
- N. P. Gajjar published a paper entitled "Reconfigurable Architecture for GNSS Receiver", at NUiCONE, Nirma University during December 06-08, 2012.
- Y. N. Trivedi published a paper entitled "Performance Analysis of Alamouti Transmit Diversity Using Partial Channel Knowledge", at NUICONE, Nirma University during December 06-08, 2012.
- Chetna Chauhan published a paper entitled "Structural and Magnetic properties of BaMg2Fe10019 hexaferrite particles", at Gujarat Science Congress, M. S. University, Baroda during February 26, 2012.
- Chetna Chauhan published a paper entitled "Dielectric properties of BaMg2Fe10019 hexaferrite prepared using a stearic acid gel route", at National conference on Condensed Matter and Materials Physics, Department of physics, Vallabh Vidhyanagar during March 3-5, 2012.

- Chetna Chauhan published a paper entitled "Structural properties of Ba-Zn hexaferrite prepared by a solvent free method", at National Symposium on Advances in Materials Science and Technology, Department of Physics, School of Sciences, Gujarat University, during Feb 3-4, 2012.
- Chetna Chauhan published a paper entitled "Synthesis and characterization of BaFe12019 nano particles by a heat treatment method", at International conference on Super molecules and Nano materials-Research and Applications, Department of Chemistry Gujarat University, during Feb 6-8, 2012.
- Piyush Bhatasana published a paper entitled "Modeling of MEMS based Switch for Millimeter Wave Application", at National conference on Recent Trends in Microwave Techniques and Application during July 30-August-01, 2012.
- Chetna Chauhan published a paper entitled "Seminar on Preparation and characterization of Crystalline and non-crystalline solids", at PCCNS, department of Physics, The M.S. University of Baroda, during Nov 02, 2012.
- Chetna Chauhan published a paper entitled "FTIR and Dielectric properties of BaCa1.4Co0.6Fe16027 hexaferrite prepared by a stearic acid gel route", at Current Trends in Research and Applications of Physical Sciences in Gujarat (CTRAPSG-12), Department of Physics and alumni association, Sardar Patel University, Vidyanagar, during December 29, 2012.
- Vijay Savani and Nagendra Gajjar published a paper entitled "Self Healing System to mitigate Single Event Upset in SRAM based FPGA for Space Application", in Global Journal of Engineering and Applied Sciences, January – 2012, Vol 4, Issue 1, 188-192.
- Akash Mecwan, Vijay Savani and Piyush Bhatasana published a paper entitled "Review of Adaptive Modulation Recognition Techniques", Journal of Communication Engineering & Systems, August – 2012, Vol 2, Issue 2.

- Dhaval Pujara published a paper entitled "Cancellation of High Cross-Polarization of an Offset Parabolic Reflector Antenna using a Rectangular Matched Feed", in ETE Journal of Research, August – 2012, Vol 58, Issue 4, 317-321.
- Akash Mecwan, Vijay Savani, Piyush Bhatasana published a paper entitled "Implementation of Data Compression Algorithms on FPGA using Soft-core Processor", in International Journal of Advancements in Technology, December –2012, Vol 3, Issue 4, 270-276.
- Neha Patni and Neha Tripathi has presented a paper on "Sustainability of biodegradable substitutes of Plastics: A Review" in International Conference on "Advancements in Polymeric Materials (APM 2012) LARPM (Laboratory for advance research in polymeric materials) and CIPET (Central Institute of Plastic Engineering and Technology)," Ahmedabad during 10-12 February, 2012.
- Dr Shibu G Pillai has presented a paper on "Microwave Assisted Green Synthesis of Gold Nanoparticles in International Conference on "Supramolecules and Nanomaterials Research and Applications -2012 Department of Chemistry, Gujarat University during 6/02/2012 - 8/02/ 2012.
- Dr Shibu G Pillai has presented a paper on "Predicting the critical properties of calix[4]resorcinarene using various group contribution methods" in International Conference on "Supramolecules and Nanomaterials Research and Applications -2012 Department of Chemistry, Gujarat University" during 6/02/2012 - 8/02/ 2012.
- Prof.R.N.Reddy has presented paper on "Hydrogen Production using glycerol by steam reforming process, its storage and utilization" in national conference on "Green Chemistry Technology for Sustainable Development, NSGC 2012, Vallabh Vidyanagar" during 24/02/2012 – 25/02/2012.
- Dr Shibu G Pillai has presented a paper on "Carrier transport study on diluted Manganese

doped Boron nitride nanostructure (quantum well) under electric and magnetic fields via Electron phonon interactions" in International Conference on Supramolecules and Nanomaterials Research and Applications -2012, Department of Chemistry, Gujarat University" during 6/02/2012 – 8/02/2012.

- Prof. Priya Patel & Dr Jayesh Ruparelia has presented a paper on "A Review On Direct Anodic Electro-Oxidation As A Clean Technology In Organic Effluent Treatment" in 28th National Convention of Chemical Engineers & National Seminar on "Green Technology & Environmental Sustainability". The Institute of Engineers, India, Gujarat Section, Ahmedabad during 7/09/12 -8/09/12.
- Dr Shibu G Pillai, Pallavi Das and Survashish has presented a paper on "Synthesis of gold nano particles using plant extract in 28th National Convention of Chemical Engineers & National Seminar on "Green Technology & Environmental Sustainability". The Institute of Engineers, India, Gujarat Section, Ahmedabad during 7/09/12- 8/09/12.
- Dr Shibu G Pillai, Parth Solanki has presented a paper on "Nano Silica: A revolution towards green nanotechnology" in 28th National Convention of Chemical Engineers & National Seminar on "Green Technology & Environmental Sustainability". The Institute of Engineers, India, Gujarat Section, Ahmedabad during 7/09/12- 8/09/12.
- Dr A P Vyas, Mr. Rahul Goel has presented a paper on "A review on Biodiesel Production Processes" on 28th National Convention of Chemical Engineers & National Seminar on "Green Technology & Environmental Sustainability" The Institute of Engineers, India, Gujarat Section, Ahmedabad during 7/09/12 -8/09/12.
- Prof. Nikita chokshi, Ms. Shreya Sahajpal has presented a paper on "Bio fuels from Renewable Resources" in 28th National Convention of Chemical Engineers & National Seminar on "Green Technology &

Environmental Sustainability". The Institute of Engineers, India, Gujarat Section, Ahmedabad during 7/09/12- 8/09/12.

- Prof. Parag Saxena, Jitesh Patel, Dr Milind Joshipura has presented a paper on "A Review on thermo physical properties of Biodiesel" in 28th National Convention of Chemical Engineers & National Seminar on "Green Technology & Environmental Sustainability" The Institute of Engineers, India, Gujarat Section, Ahmedabad 7/09/12 - 8/09/12.
- Jitesh Patel, Prof.Parag Saxena, Dr.Milind Joshipura has presented a paper on "Prediction of thermo physical Properties of Biodiesel from Jatropha oil" in 28th National Convention of Chemical Engineers & National Seminar on "Green Technology & Environmental Sustainability". The Institute of Engineers, India, Gujarat Section, Ahmedabad during 7/09/12 -8/09/12.
- Prof. Priya Patel, Ankita Saraf, Nikita Bendre, Dr.Jayesh Ruparelia has presented paper on "Electrocatalytic (Electrode p[-Materials) in Electrochemical wastewater treatment" at Nuicone 2012 Institute of technology, Nirma university during 06/12/12 - 08/12/12.
- Prof. Femina Jitendra Patel, Dr. Sanjay S Patel has presented a paper on "La1-xSrxCoO3 (x=0, 0.2) perovskites type catalyst for carbon monoxide emission control from auto-exhaust" at Nuicone 2012 Institute of technology, Nirma university 06/12/12 - 08/12/12.
- Mrs. Bhavna Devang Soni, Dr. Jayesh P Ruparelia has presented a paper on "Decolourisation & mineralization of RB-5 with transition metal oxide coated electrodes by electrodes by Electrochemical Oxidation" at Nuicone 2012 Institute of technology, Nirma university 06/12/12 - 08/12/12.
- Dr. Shibu G Pillai, Dr. Ankur Dwivedi, Prof. Neha Patni has presented a paper on "Liquid-Liquid Extraction and Spectrophotometric Determination of Vanadium(V) with p-Carboxy-N-Phenyl-Calix[4]resorcinarene-hydroxamic Acid" at Nuicone 2012 Institute of technology, Nirma university during 06/12/12 - 08/12/12.

- Ms. Neha Patni, Dr. Shibu G Pillai, Dr. Ankur Dwivedi has presented a paper on "Wheat as a Promising Substitute of Corn for Bioethanol Production" at Nuicone 2012 Institute of technology, Nirma university during 06/12/12 -08/12/12.
- Ms. Shreya Sahajpal, Dr. Parin D Shah has presented a paper on "Thermal Design of Ammonia Desuperheater-Condenser and Comparative Study with HTRI" at Nuicone 2012 Institute of technology, Nirma university during 06/12/12-08/12/12.
- Dr. Milind Joshipura has presented a paper on "Use of Genetic Algorithm to Model Phase Equilibria of systems consisting of 3-Methylthiophene & hydrocarbons" at Nuicone 2012 Institute of technology, Nirma university during 06/12/12 - 08/12/12.
- Mr. Nikunj K Patel, Dr. Milind Joshipura has presented paper on "Generalized PSRK model for prediction of liquid density of ionic liquids" at Nuicone 2012 Institute of technology, Nirma university during 06/12/12 -08/12/12.
- Ms. Sayali Ashok Jawale, Prof. Parag Saxena, Dr. Milind Joshipura has presented a paper on "A review on prediction of properties of biodiesel and blends of biodiesel" at Nuicone 2012 Institute of technology, Nirma university 06/12/12 - 08/12/12.
- Mr. Parag Saxena, Mr. Jiteshkumar C. Patel Dr. Milind Joshipura has presented a paper on "Prediction of vapor pressure of fatty acid methyl esters" at Nuicone 2012 Institute of technology, Nirma university 06/12/12 -08/12/12.
- Mr. Kartik S Avasthi, Mr. Narasimha R Reddy, Dr. Sanjay S Patel has presented a paper on "Challenges in the production of hydrogen from glycerol a biodiesel byproduct via steam reforming process" at Nuicone 2012 Institute of technology, Nirma University during 06/12/12 08/12/12.
- Mr.Bharat N Chatwani, Dr. Raju K Mewada has presented a paper on "Development of rate expression for glycerol hydrogenation reaction"

at Nuicone 2012 Institute of technology, Nirma university during 06/12/12 - 08/12/12.

- Mr.Buddhdev Jimit P, Prof.Sandip sharma, Dr.Jayesh Ruparelia, Manish Patel, has presented a paper on "Studies on Degradation of Reactive Red 135 Dye in Wastewater using Ozone" at Nuicone 2012 Institute of technology, Nirma university during 06/12/12 - 08/12/12.
- Ms. Femina J Patel, Dr. Sanjay S Patel, Sandip K Chawla, Milka George has presented a paper on "Production of synthesis gas by carbon dioxide reforming of methane over nickel based and perovskite catalysts" at Nuicone 2012 Institute of technology, Nirma university during 06/12/12 - 08/12/12.
- Mr. Punit Patel, Ayyan Karmakar, Chetan Jariwala, Dr. Jayesh Ruparelia has presented a paper on "Preparation and Characterization of SnO2 Thin Film Coating using rf-Plasma Enhanced Reactive Thermal Evaporation" at Nuicone 2012 Institute of technology, Nirma university during 06/12/12 - 08/12/12.
- Priyank Khirsariya, Raju K Mewada has presented a paper on "Single Step Oxidation of Methane to Methanol Towards Better Understanding" at Nuicone 2012 Institute of technology, Nirma university during 06/12/12 -08/12/12.
- Prof.Parag Saxena, Jitesh Patel, Dr.Milind Joshipura has presented a paper on "Property prediction of Jatropha based biodiesel" at CHEMCON 2012 NIT Jalandhar on 28/12/12.
- Varun Sai, Dr.Milind Joshipura, Nikunj Patel has presented a paper on "Predictions of vapor pressures of ten ionic liquids using cubic equations of state" at CHEMCON 2012 NIT Jalandhar on 28/12/12.
- Prof Femina Patel & Dr Sanjay S Patel has presented a paper on "Synthesis of LaCoO3 nano perovskite catalysts by mechanochemical method for environmental application of automotive CO oxidation ECMA's" on 1st international conference on "Pathways to meet future emission standards for off road engines

Emission Control Manufacturer Association, Delhi" during 3/09/12 to 4/09/12.

- Prof. Neha Patni has presented a Poster on " Technology Independence And Innovations Through Free And Open Source Systems" in Indo – US symposium on "Women in Engineering leading global innovation" at Bangalore, Organized jointly by IIT BOMBAY & IUSSTF & Society of women Engineers during 29/08/12-31/08/12.
- Prof. R R Trivedi, Drawing Automation of Reactor Nozzle, International Journal of Engineering Research and Applications (IJERA) Vol. 2, Issue 1, Jan-Feb 2012, pp.281-286 281 (Vol. 2, Issue 1, Jan-Feb 2012, pp.281-286 281)
- Dr V J Lakhera, Enhanced Boiling Outside 8 × 3 Plain and Coated Tube Bundles, Journal ; Heat Transfer Engineering, Volume 33, Issue 9, 2012, Page No.: 828-834 (ISSN No: 0145-7632 (Print), 1521-0537 (Online))
- Prof. B. A. Modi, Development of a hydroforming set up for deep drawing of square cups with variable blank holding force technique, got accepted at International Journal of Advanced Manufacturing Technology (Accepted)
- Prof. B. A. Modi, Investigation on influence of process parameters on formability of AA5182 sheet in hydroforming of square cups, Journal of Materials Engineering and Performance (Uunder review)
- Dr R N Patel, Investigation on influence of process parameters on formability of AA5182 sheet in hydroforming of square cups, Journal of Materials Engineering and Performance (Under Review)
- Dr. K. M. Patel, Developing mathematical model to predict tensile strength of friction stir welded AA8011 aluminium alloy, Materials and Design Journal (Submitted)
- Prof. S.J. Joshi, Stress Intensity Factors for an inclined / eccentric crack in a finite orthotropic lamina, ASME Journal of Engineering Materials and Technology (Submitted)

- Prof A M Gohil, Bond Energy Algorithm with Cross Weightage as decision parameter to form machine cell and part family, Volume - V, 2012.
- Prof. Reena Trivedi, 2-D fracture analysis of an excavator arm, GITJournal of ngineering & Technology Volume V, 2012.
- Dr D S Sharma presented a paper titled "Moment Distribution around Circular/Elliptical/Triangular Cutouts in Infinite Symmetric Laminated Plate" at 4th International Conference on Structural Stability and Dynamics organized by National Institute of Technology, Jaipur during 4-6th Jan. 2012.
- Dr D S Sharma presented a paper titled Mechanical Properties of Structural alloys at Cryogenic Temperatures at First International Conference on Materials Processing and Characterization"(CMPC2012) organized by Gokaraju Rangaraju Institute of Engineering and Technology, Hyderabad, Andhra Pradesh,INDIA during Jan '12.
- Prof. S. J. Joshi paper titled Interaction of Two Cracks in an Orthotropic Lamina Subjected to Uniaxial Loading accepted for international journal of structural integrity.
- Prof N K Shah presented a paper titled "Numerical Transient Heat Transfer Analysis of Reactor for Magnesium based Alloys for Hydrogen Storage Application" at International Conference on Mechanical and Industrial Engineering organized by IIMP Bhuvneshwar during March'12.
- Prof N K Shah and Prof. S V Jain presented a paper titled Testing of Rigid Cellular Thermal Insulation as per Indian Standards at Proceedings of the International Conference at Dehradun during Jun'12
- Prof. N. K. Shah presented a paper titled "Discrete Simulation of Fluid Dynamics International Conference on Discrip simulation of fluid dynamics" held at Bangalore during Jul'12.
- Prof. B A Modi presented a paper titled "Effect of Process Parameters on Formability of

AA5182 Alloy in Hydroforming of Square Cups" at International Conference of International deep Drawing Research Group organized by IIT Bombay during Dec'12.

- Prof. B A Modi presented a paper titled Prediction of Failure in FE Analysis of Sheet Hydroforming of AA 5182 Alloy Using Stress Based Forming Limit Diagram at International Conference of International Research Deep Drawing Research Group organized by IIT Bombay during Dec'12.
- Prof. A M Gohil presented a paper titled Abrasive Flow Machining: A Survey at NUiCONE '12 organized by Nirma University, Ahmedabad during Dec'12.
- Prof. A M Gohil, Prof. D B Shah presented a paper titled "Overall Equipment Effectiveness (OEE) Calculation- Automation through Hardware & Software Development" at NUiCONE'12 organized by Nirma University, Ahmedabad during Dec'12.
- Prof. A. M. Gohil, Prof. D. B. Shah presented a paper titled Total Productive Maintenance (TPM) Implementation in a Machine Shop: A Case study at NUiCONE-12 organized by Nirma University, Ahmedabad during Dec'12.
- Prof. J M Dave presented a paper titled "Vibration Isolation for Reciprocating Compressor Foundation" at NUiCONE'12 organized by Nirma University, Ahmedabad during Dec'12.
- Dr Vlkas Lakhera presented a paper titled "Thermal Optimization of an Ice Cream Hardening Process at NUiCONE'12 organized by Nirma University, Ahmedabad during Dec'12.
- Dr R N Patel presented a paper titled "Kinetic Parameter Estimation of Lignite by Thermogravimetric Analysis" at NUiCONE '12 Organized by Nirma University, Ahmedabad during DEC'12
- Prof. Reena Trivedi and Dr D S Sharma presented a paper titled "Static Analysis of electrostatically actuated micro cantilever

beam" at NUiCONE'12 organized by Nirma University, Ahmedabad during Dec'12.

- Prof. A M Gohil presented a paper titled Parametric Optimization of Hydraulic Modular Trailer Frame Using ANSYS (APDL) at NUiCONE'12 organized by Nirma University, Ahmedabad during Dec'12.
- Prof. D P Pandya, Prof. N D Ghetiya presented a paper titled Prediction of process parameters effect on MRR and surface roughness in Abrasive water jet cutting using Artificial Neural Network at NUiCONE'12 organized by Nirma University, Ahmedabad during DEC'12.
- Prof. N D Ghetiya presented a paper titled Solidification Analysis of Automobile Clutch Component by Casting Simulation at NUiCONE'12 organized by Nirma University, Ahmedabad during DEC'12
- Prof. N D Ghetiya presented a paper titled Design and Analysis of Fixture for Welding a Hopper at NUiCONE'12 organized by Nirma University, Ahmedabad during Dec'12.
- Dr K M Patel presented a paper titled Defects elimination and fatigue life prediction in the investment casting of the hook used in the pasta making machine at AIMTDR 2012 organized by Jadavpur University, Kolkata during 2012.
- Dr K M Patel presented a paper titled Effects of welding parameters on tensile strength of aluminium alloy joint produced by friction stir welding at AIMTDR 2012 organized by Jadavpur University, Kolkata during 2012.
- Prof. S V Jain presented a paper title Solar parabolic trough collector and their applications at International Conference on Information, Knowledge & research in engineering, technology & sciences-ICIKR-ETS-2012 organized by G. K. Bharad institute of engineering & amoghsiddhi education Society, Sangli during March 2012.
- Prof. N K Shah and Prof S V Jain presented a paper titled Testing of Rigid Cellular Thermal Insulation as per Indian Standards at

International Conference on Mechanical and Industrial Engg. ICMIE 2012 at Dehradun, India during Jun 2012.

- Prof. B A Modi presented a paper titled Studies on Effect of Process Parameters on Hydroforming of Square Cups from Aluminium Alloy at International Deep Drawing Research Group – IDDRG 2012 organized by IIT Bombay during Nov'12.
- Dr R N Patel presented a paper titled CFD for centrifugal pumps: a review of the state-of-theart at NUiCONE 2012 organized by Nirma University, Ahmedabad during December 12.
- Dr R N Patel presented a paper titled "Cost Analysis of Pump as Turbine for Pico Hydropower Plants – A Case Study" at NUiCONE 2012 organized by Nirma University, Ahmedabad during Dec'12.
- Dr R N Patel presented a paper titled Numerical optimization of guidevanes and reducer in pump running in turbine mode at NUiCONE 2012 organized by Nirma University, Ahmedabad during Dec'12.
- Prof. M M Chauhan presented a paper titled FEA and Topology Optimiation of 1000T Clamp Cylinder for Injection Molding Machine at NUICONE 2012 organized by Nirma University, Ahmedabad during Dec'12.
- Prof. N K Shah and Dr R N Patel presented a paper titled CFD Analysis of Spatial Distribution of Various Parameters in Downdraft Gasifier at NUiCONE 2012 organized by Nirma University, Ahmedabad during Dec'12.
- Dr R N Patel presented a paper titled Determination of Time Delay and Rate of Temperature Change during Tyre Curing (Vulcanizing) Cycle at NUiCONE 2012 organized by Nirma University, Ahmedabad during Dec'12.
- Prof. D B Shah presented a paper titled 3D Parametric Modeling for Product Variants Using Case Study on Inner Ring of Spherical Roller Bearing at NUiCONE 2012 organized by Nirma University, Ahmedabad during Dec'12.

- B. A. Modi presented a paper titled Stiffness and Thermal Analysis of Doubly Curve Sandwich Panel for an Automobile Application at NUiCONE 2012 organized by Nirma University, Ahmedabad during Dec'12.
- Prof. B A Shah and Prof. A M Lakdawala presented a paper titled Numerical Investigation of Flow Induced Vibration for the Triangular Array of Circular Cylinder at NUICONE 2012 organized by Nirma University, Ahmedabad during Dec'12.
- Dr K M Patel presented a paper titled Design of an automatic system for opening and closing of mould and core in Gravity Die Casting Machine at NUICONE 2012 organized by Nirma University, Ahmedabad during Dec'12.
- Dr K M Patel presented a paper titled Design and analysis of fixture for welding an exhaust impeller at NUICONE 2012 organized by Nirma University, Ahmedabad during Dec'12.
- Dr. K. M. Patel presented a paper title Design and analysis of air film transporter at NUiCONE 2012 organized by Nirma University, Ahmedabad during Dec'12.
- Dr R N Patel and Dr Tejas Raval presented a paper titled Optimization of the auxiliary power consumption of the combined cycle power plant at NUiCONE 2012 organized by Nirma University, Ahmedabad during Dec'12.
- Dr Jatin Dave, Dr D S Sharma, Prof M M Chauhan presented a paper titled Stress Intensity Factors for Hole With Cusp in Infinite Anisotropic Media at 3rd Asian Conference on Mechanics of Functional Materials and Structures at IIT Delhi during 5-8th Dec 2012.
- Prof. J M Dave and Dr D S Sharma presented a paper titled Moment Resultant For Symmetric Anisotropic Plate With Super Elliptical Shape Hole at 3rd Asian Conference on Mechanics of Functional Materials and Structures at IIT Delhi during 5-8 December 2012.
- Dr D S Sharma presented a paper titled Stress Intensity Factors for Internally Loaded Crack in Infinite Plate at 4th International Congress on

"Computational Mechanics and Simulation at IIT Hyderabad during 9-12 December 2012.

- Prof. M M Chauhan presented a paper titled Faillure Strength of Orthotropic Around Oval shaped Hole in Infinite Composite Plate at 4th 4th International Congress on "Computational Mechanics and Simulation at IIT Hyderabad during 9-12 December 2012
- Prof. V M Bhojawala and Prof. D V Patel, presented a paper titled Topology optimization of a column at COMET'12 held at ST. Joseph College of Engg.and Tech, Kerala on 2nd June 2012.
- Prof. V M Bhojawala and Prof. D V Patel presented a paper titled Topology Optimization of a bed of vertical Machining center at RAM '12 at SVNIT Surat during 27-29th June 2012.
- Prof. V M Bhojawala and Prof. D V Patel presented a paper titled Software Development for automated designing and analysis of wire rope drum at RAM 2012 at SVNIT Surat during 27th – 29th June 2012.
- Prof Sapan H Mankad has published paper in International Journal of Computer Science Engineering & Information Technology Research in August, 2012.
- Prof. Rajan Dutt and Prof. Rushabh Shah presented a paper in National Conference on Advances in Engineering and Technology at Kalol Institute of Technology and Research, Kalol, March 2012.
- Prof. Ankit Thakkar and Dr. K. Kotech published a paper in International Journal of Computer Science and Network, March 2012.
- Dr. Kuntal Patel published a paper in International Journal of research in computer management and applications, March 2012.
- Prof. Priyanka Sharma and Dr. S.N.Pradhan published paper in International Journal of Advancements in Technology.
- Prof. Ankit Thakkar published a paper in International Journal of Computer Science Research and Application, vol 2, Issue 2.

- Prof. Pooja Shah has published paper in International Journal of Computer Applications in September, 2012.
- Prof. Pooja Shah and Prof. Parita Oza have published paper in International Journal of Science and Technology in September, 2012.
- Prof. Zunnun Narmawala and Prina Shah has published paper in IOSR CSE journal in December, 2012
- Prof Ankit Thakkar has published a paper in 3rd Nirma University International Conference on Engineering (NUICONE - 2012) which was held during December 6-8, 2012 at Nirma University, Ahmedabad, India
- Prof. T. H. Panchal, Prof. A. N. Patel, "Analysis of Indirect Vector Controlled Induction Motor Drive" at National Conference on Technology and Management-NCTM 2012, Sankalchand Patel College of Engineering, Visnagar, Gujarat, 20 – 21st January, 2012.
- Prof. C. R. Mehta, "Induction calculation for various configuration of overhead transmission line" at National Conference on Technology and Management-NCTM 2012, Sankalchand Patel College of Engineering, Visnagar, Gujarat, 20 – 21st January, 2012.
- Prof. C. R. Mehta, "Design and Implementation of Speed control of DC Motor Using PIC 16F877A" at National Conference on Technology and Management-NCTM 2012, Sankalchand Patel College of Engineering, Visnagar, Gujarat, 20 – 21st January, 2012.
- Prof. Dhara Mehta, "Sensorless BLDC Motor Controller", at National Conference on advances and challenges in Engineering and Science.(NCACES'12), Laljibhai Chaturbhai Institute of Technology (LCIT), Bhandu, Gujarat, 13 – 14th April, 2012.
- Dr. S. C. Vora, "Designing and Prototyping Automatic Synchronizers for Paralleling of Alternators", at National Conference on Emerging Vistas of Technologies in 21st

Century, Futuristic Trends in Electrical Engineeirng (NCEVT'12), Parul Institute Of Technology, Vadodara, 14 – 15th April, 2012.

- Dr. S. C. Vora, "PMU Placement in IEEE 14-bus System and an Aspect on Transmission Line Fault Detection", at National Conference on Emerging Vistas of Technologies in 21st Century, Futuristic Trends in Electrical Engineeirng (NCEVT'12), Parul Institute Of Technology, Vadodara, 14 – 15th April, 2012.
- Dr. S. C. Vora, "Computational and FEM Based Analytical Aspects of Medium Capacity- Turbo Alternator Design", at Contemporary control and soft computing in Electrical Engineering (ConCon 2012), AU College of Engineering (A), Andhra University, Visakhapatnam, 30 – 31st May, 2012.
- Prof. C. R. Mehta, "Analysis of Control System and Implementation for Speed control of DC Motor Using PIC 16F877A", at National Conference on Emerging Vistas of Technologies in 21st Century, Futuristic Trends in Electrical Engineeirng (NCEVT'12), Parul Institute Of Technology, Vadodara, 14 – 15th April, 2012.
- Prof. C. R. Mehta, "Soft Computing based Fault Severity Detection for Induction Motor", at National Conference on Emerging Vistas of Technologies in 21st Century, Futuristic Trends in Electrical Engineeirng (NCEVT'12), Parul Institute Of Technology, Vadodara, 14 – 15th April, 2012.
- Dr. P. N. Tekwani, Prof. D. B. Dave, "Design, Analysis and Simulation of Three-Phase Active Front-End Converter with Unity Power Factor", at the International Conference on Electrical Engineering and Computer Science (ICEECS 2012), ISBN: 978-93-81693-98-8, Institute for Project Management Pvt. Ltd., Bhubaneswar, held at Goa, India, 05th May, 2012.
- Dr. S. C. Vora, Prof. P. N. Kapil, "Simulation, Design and Realization of Single Phase PWM Boost Rectifier" at the 3rd Nirma University International Conference on Engineering, NUICONE 2012, Institute of Technology, Nirma Univeristy, Ahmedabad, Gujarat, India, 7th December, 2012.

- Prof. M. T. Shah, Dr. P. N. Tekwani, "Design, Modelling and Simulation of Three-Phase Front-End Converter for Unity Power Factor and Reduced Harmonics in Line Current", at the 3rd Nirma University International Conference on Engineering, NUiCONE 2012, Institute of Technology, Nirma University, Ahmedabad, Gujarat, India, 7th December, 2012.
- Prof. A. N. Patel, "Design Calculation and Simulation Verification for 2 kW Grid Connected Transformerless Photovoltaic Inverter", at the 3rd Nirma University International Conference on Engineering, NUiCONE 2012, Institute of Technology, Nirma Univeristy, Ahmedabad, Gujarat, India, 7th December, 2012.
- Prof. A. N. Patel, "Simulation & Analysis of Three Phase Voltage Source Inverter using Four Semiconductor Switches", at the 3rd Nirma University International Conference on Engineering, NUiCONE 2012, Institute of Technology, Nirma University, Ahmedabad, Gujarat, India, 7th December, 2012.
- Prof. P. N. Kapil, "Review of Modulation Schemes for Loss Analysis in Inverters", at the 3rd Nirma University International Conference on Engineering, NUICONE 2012, Institute of Technology, Nirma University, Ahmedabad, Gujarat, India, 7th December, 2012.
- Prof. M. T. Shah, "Three-Phase Front End Converters and Current Control Techniques for Unity Power Factor", at the 3rd Nirma University International Conference on Engineering, NUiCONE 2012, Institute of Technology, Nirma University, Ahmedabad, Gujarat, India, 7th December, 2012.
- Prof.C.R.Mehta,Modeling, Simulation and Implementation of Speed control of DC Motor Using PIC 16F877A", International Journal of Emerging Technology and Advanced Engineering (ISSN 2250-2459), Volume 2, Issue 3, March 2012.
- Prof. S. N. Jani," Simulation and Development of Automatic Excitation Control for Synchronous Motor", International Journal of Emerging

Technology and Advanced Engineering (ISSN 2250-2459), Volume 2, Issue 3, March 2012.

- Dr. P. N. Tekwani, Prof. Mihir Shah, "Investigations on current error space phasor based self adaptive hysteresis controller employed for shunt active power filter with different techniques of reference compensating current generation", Praise Worthy Prize, International Review on Modelling and Simulations (IREMOS), ISSN: 1974-9821, Impact Factor 6.55, vol. 5, no. 2 (Part A), Italy, April 2012.
- Prof. (Dr.) D. M. Adhyaru "Fuzzy based selection of PWARX model for the nonlinear hybrid dynamical systems" at 3rd International Conference on Current Trends in Technology, NUiCONE-2012, Ahmedabad on December 6-9, 2012.
- Prof. (Dr.) D. M. Adhyaru "Survey of Model Reference Adaptive Control " at 3rd International Conference on Current Trends in Technology, NUiCONE-2012, Ahmedabad on December 6-9, 2012.
- Prof. J. B. Patel "Fuzzy logic based decision support system framework for irrigation scheduling" at 3rd International Conference on Current Trends in Technology, NUiCONE-2012, Ahmedabad on December 6-9, 2012.
- Prof. Jalpa Shah "Fuzzy Controlled Wireless Touch Screen Based Data Acquisition System for Pump Monitoring and Control", at 3rd International Conference on Current Trends in Technology, NUiCONE-2012, Ahmedabad on December 6-8, 2012.
- Prof. Rajesh Zadfiya "Process Modeling of Reheat Furance", at 3rd International Conference on Current Trends in Technology, NUiCONE-2012, Ahmedabad on December 6-8, 2012.
- Prof. Ankit Sharma "Hand Geometry based Recognition System", at 3rd International Conference on Current Trends in Technology, NUiCONE-2012, Ahmedabad on December 6-9, 2012.

- Dr. D. M. Adhyaru "State observer design for nonlinear systems using neural network" in the journal of Applied Soft Computing, Volume 12, Issue 8, August 2012, pp. 2530-2537.
- H.K.Patel of IT-NU with Raj Nagarsheth & Sharang Parnerkar of IT-NU " Performance Comparison of Permanent Magnet Synchrous Motor and Induction Motor for Cooling Tower Application", International Journal of Emerging technology & Advanced Engineering , ISSN: 2250-2459.

3rd Nirma University International Conference on Engineering NUiCONE-2012 06-08 December, 2012 Institute of Technology, Nirma University, Ahmedabad

The third "Nirma University International Conference on Engineering- NUiCONE-2012" was successfully organized on 06-08 December, 2012. The technical collaboration and publication with great avenues of research fields like IEEE-Science Direct made the research papers visible to world. In true sense, It was the multidisciplinary conference with seven parallel tracks like electrical engineering, instruments & control engineering, elctronics & communication engineering, civil engineering, mechanical engineering and chemical engineering tracks. The e-Publicity was done through the presence of NUiCONE on all conference alert sites and technical researchers' networking sites. As a part of Institute's Campaigning against Plagiarism, the self check for plagiarism from author was demanded. Submission of more than 850 good quality research papers includes the submission from foreign countries like USA, UK, Australia, China, Malaysia, Brazil, Bangladesh, Chez Republic etc; from industries/organization like Intel, ST Microelectronics, ONGC, Infosys, DIET, INTUK etc. and from more than 23 states of India as well as from reputed institutes like IITs and NITs. More than 400 eminent personality were invited for reviewing the papers. Nearly 275 good quality research papers selected for oral presentation. Approximately 30% acceptance ratio signifies the quality of conference. More than one thousand participants / delegates to actively participate in conference.

More than eighteen plenary talk from eminent speakers like Directors and Professors from reputed organizations like DRDO, IIT, CSIR, GETCO, CPLA, Linde and so on. Pre-conference Tutorials in different tracks were organized. Association with Institute of Engineers (IEI), IAS Gujarat Chapter, American Society of Civil Engineers, Indian Institute of Chemical Engineers, ISHRAE and ASHRAE. A life time memorable souvenir, Proceeding DVD containing rich set on conference contents, well equipped conference kit and nice & beautiful stay with good quality food really made the conference a life time memory for participants.

Foundation – Day – October 03, 2012 Felicitation Programme Report

On October 03, 2012, Foundation Day of Institute of Technology, Nirma University was celebrated, besides other activities, felicitation programme was arranged from 4.00 pm onwards at NIM Auditorium where university felicitated all the students, non-teaching and teaching staff members who had achieved some remarkable things in various categories. Programme was coordinated by Prof. K.P.Agrawal from Computer Science and Engineering department. Various categories for awards were :

1) Gold Medals to toppers,

Interface

- 2) Student participation in National and International Level Events which includes :
 - a. Paper and Poster Presented at National and International Level
 - b. Students participating and winning 1st,2nd, or 3rd position in Quiz, Essay Writing competition, Coding Competition , Robotic Competition and others.
 - c. Any other significant achievement
- 3) Certificates for Faculty /non teaching includes :
 - a. Publication/presentation of papers in international journal/International conference outside India.
 - b. Special Certificates
 - i. Ph.D completion certificate
 - ii. Publication of book
 - iii. Best faculty awardee
 - iv. Best student award in Mtech
 - v. Certificate for Gold Medalist faculty
 - vi. Certificate for Best Thesis in Mtech/Ph.d
 - vii. Robocon faculty advisor for winning the competition at National level
 - viii. Major project completed
 - ix. Ph.D. guided(after competition)
 - c. Any other significant achievement

All awardees were given gift in the form of book entitled The Ultimate Gift – by Jim Stovell along with certificate of achievement/appreciation. Gold medals were given to 17 students, 01 silver and 01 bronze medals were given.

Research/ Consultancy work at institute

		1					
Sr. No.	Dept.	Name of Faculty Member(s)	Title of Research Work	Place and Address of Organization, if Collaborative	Purpose / Objective	Funding Agency	Outlay, Rs.
1	Mechanical	Dr. K. M Patel	Understandin g the immersed friction stir welding of aluminum alloys	MED, IT, NU	Research Work	DST	Rs.22,00,000/- (Applied)
2	Mechanical	Prof. S. J. Joshi, Dr. K. M. Patel, Prof. B. A. Modi	Development of finite element model to predict the distortion of CFRP reflectors	MED, IT, NU	Research work	SAC ISRO, Ahmedabad	Rs. 10,84,000/- (Applied)
3	Mechanical	Prof. V. R. Iyer, Prof. B. A. Modi, Dr. Harish Dalal, Prof.M. M. Chauhan, Prof. D. B. Shah	Earring Problem	MED, IT, NU	Consultancy	Harsha Engineers	Rs. 3.00 lacs
4	Mechanical	Prof. S. J. Joshi, Prof. N. D. Ghetiya, Prof. V. M. Bhojawala, Prof. J. M. Dave, Prof. D. V. Patel	Re-design of flyer	MED, IT, NU	Consultancy	Inspiron Engg. Pvt. Ltd. Ahmedabad	Rs. 2.5 lacs
5	Mechanical	Prof. S. J. Joshi, Prof. V M Bhojavala, Prof. D V Patel	FEA of Gate Valves	MED, IT, NU	Consultancy	Oswal Industries Ltd.	Rs. 70,000/-
6	Mechanical	Dr. D. S. Sharma, Prof. M. M. Chauhan, Prof. D. B. Shah	FEA of ball valve components	MED, IT, NU	Consultancy	Flow Chem Industries	Rs.40,000/-
7	Mechanical	Dr. R. N. Patel, Dr. V. J. Lakhera	Redesign of Heat Setting Chambers	MED, IT, NU	Consultancy	Inspiron Ltd.	Rs. 5,00,000/-
8	Mechanical	Dr. D. S. Sharma	FEA of Pressure Vessel	MED, IT, NU	Consultancy	Inox Ltd	Rs. 1,00,000/- In pipeline
9	Mechanical	Dr. D. S. Sharma Prof. R R Trivedi	Design of transportatio	MED, IT, NU	Consultancy	InspirOn	Rs. 5,00,000/-

Sr No	Company	Amount, Rs
	Audit Work	
1	Dhrangadhra Chemical Works, Dhrangadhra	82725
2	Gujarat Fluorochemicals, Vagra, Bharuch	233395
3	Reliance Gas Transportation Infrastructure Limited, Compressor Station No 09 at Kanjanhari - Valsad & 10 (A&B) at Bhadbhut - Bharuch	459951
4	Torrent Pharmaceuticals, Mehsana	235956
5	Essar Oil, Jamnagar	730340
	Total-A	1742367
	Adequacy Work	
1	Kesar Chemicals, Ahmedabad	38605
2	Common Effluent Treatment Plant, Kalol	66180
3	Adi Chemicals, Ahmedabad	66180
4	Navratan Chemicals, Ahmedabad	66180
5	M G Textile Mill, Ahmedabad	66180
6	Century Pharmaceuticals, Dahod	56180
7	Siddhi Consultant, Ankleshwar	112360
8	Torrent Pharamceuticals, Ahmedabad	67416
9	Bombardier Transportation Ltd., Baroda	67416
	Total-B	606697
	Grand Total	2349064

Research/Consultancy work at institute

Consultancy work at institute:

Sr. No.	Name of Faculty Member(s)	Title and type of Training	Place and address of organization	Duration (dd/mm/yy)	Purpose /objective	Funding Agency	Outlay, Rs.
1	Prof. N. P. Gajjar	Advanced DSP and Communication Eng. with Hands on MATLAB Training	IT, Nirma University	18.12.2012- 24.12.2012	MATLAB training to the scientists	ISRO, Ahmedabad	

Sr. No	Area of Research	Project Investigator	Funding Agency	Grant in Rs.
1.	Design & Development of Current Controller Using Digital Signal Processor for Inverter Application	Prof. M. T. Shah Prof. Mihir Shah	Nirma University	99,500/-

Research Projects Ongoing

Consultancy

Name of the Company	Type of Consultancy	Duration	Revenue Earned (Rs.)
M/S Adani, Mundra	Two-Day Workshop / Training Programme on "Electrical Engineering for Non-Electrical Engineers"	May 2012	66,000/-

Research Work:

Sr. No.	Name of Faculty Member(s)	Title of Research work	Place and address of organization, if collaborative	Duration (mm/yy)	Starting date (dd/mm/yy)	Date of approval received	Presen t Status	Purpose / objective	Fundi ng Agen cy	Outlay, Rs.
1	Prof. (Dr.) D. M. Adhyaru	Ph.D. Guidance	NU		Sept. 2011	Sept. 2011	Course work finished			
2	Prof. J. B. Patel	Agriculture Support System Using Wireless Sensor Network	NU	1yr 6months	14 th December, 2011	14 th Decembe r, 2011	Going on	To develop WSN for agricultur e system	NU	1,00,000
4	Prof. J. B. Shah	RF based home appliances controlling system	NU	12 months	May 2012	February 2013	About to Finish		NU	35,000

Consultancy Work:

Sr. No	Name of Faculty Member(s)	Title of Consultancy	Place and address of organization	Duration (dd/mm/yy)	Purpose /objective	Funding Agency	Outlay, Rs.
1	Prof. (Dr.) D. M. Adhyaru	Optimization of design of electrical panel for textile machine	Inspiron Industry	March 2011 to March 2012	Cost Optima- Zation	InspirOn Engineering Pvt. Ltd., Ahmedabad	2,10,000

Ongoing	Research	Projects
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Sr. No.	Name of the faculty	Title of research	Funding Agency	Outlay Rs.
1	Dr R N Patel, and Prof S V Jain	Experimental and Theory Studies on Effect of Particle Size of Lignite on Kinetics, Specific Gasification Rate, Calorific Value of Gas and Conversion Efficiency of Gasifier Fueled with Lignite	Department of Science and Technology	10,38,000/-
2	Dr. P. R. Patel	To study satellite derived river discharge and its seasonal to inter- annual variation using radar altimeter	SAC, ISRO	18,00,000/-
3	Prof. S. S. Kolte	Calibration and validation of Euroepan Space Agency SMOS mission for Soil Moisture Mapping	Euroepan Space Agency	10,00,000/-
4	Dr. P. V. Patel	Enhancement of Torsional Resistance of R C Beams using Fibre Reinforced Polymer Composite	Institution of Engineers	1,22,000/-
5	Dr A P Vyas	Studies on Biodiesel Production	GUJCOST	5,10,000/-
6	Dr. R. N. Patel & Prof. S.V.Jain	Experimental Investigations on Pump as Turbine (PAT) for Micro Hydropower Plants	GUJCOST	4,80,000/-
7	Prof. Femina J Patel	Catalysis and its application in Environmental	Nirma University	1,00,000 /-
8	Prof. Nimish Shah	Polymers in pharmaceutical applications	Nirma University	1,00,000/-
9	Dr. M H Joshipura	Determination of Phase equilibrium for THF-Methanol and THF –Glyecrol systems	Nirma University	1,00,000/-
10	Prof. N D Ghetiya	Experimental Investigations on Immersed Friction Stir Welding of Aluminum Alloys	Nirma Universtiy	1,00,000/-

11	Prof. J.B. Patel	A project on " Agriculture Support System Using Wireless Sensor Network "	Nirma University	1,00,000/-		
12	Prof. H.K. Patel	A project on "Breath Odor Detection based on Electronic Olfaction for Medical Diagnosis	Nirma University	1,00,000/-		
13	Dr D S Sharma	Dynamic Analysis of cracked Tubes Filled with Liquid	Nirma University	40,000/-		
14	Prof. J.B. Shah	A project on " RF based home appliances controlling system	Nirma University	35,000/-		
	Total					

Research Projects Completed

Sr. No.	Area of Research	Project Investigator	Funding Agency	Grant (Rs)		
1.	Developing a remote sensing and GIS based system approach for flood forecasting and warning for lower Tapi basin	Dr. A.K. Singh	ISRO	15,93,000/-		
2.	Design and development of 32 bit RISC processor based IP core for Space Applications	Dr. N.M. Devashrayee Prof. N.P. Gajjar	ISRO	16,02,000/-		
3.	Development of Image and Signal processing algorithms on DSPS and development of an FPGA as coprocessor to DSP	Dr. S.N. Pradhan and Prof. Swati Jain	ISRO	7,95,000/-		
4.	Feasibility study of NOx reduction by Exhaust Gas Recirculation in Biodiesel Fueled C I engine	Dr. R. N. Patel, Prof. A. M. Lakdawala	GUJCOST	25,000/-		
5.	Solar collector design	Dr R K Mewada	Nirma University	1,00,000/-		
6.	Degradation of organic compound in industrial wastewater using Algae	Prof Parin Shah	Nirma University	1,00,000/-		
7.	Synthesis of perovskites based catalyst Reactive grinding ball milling) for automotive exhaust emission control	Prof F J Patel	Nirma University	1,00,000/-		
	Total					

Testing work

Sr. No.	Name of Faculty Member(s)	Title of Testing Work	Place and Address of Organization	Month, Year till Month, Year	Outlay in INR
1	Dr. V J Lakhera/ Prof. NK Shah/ Prof. S V Jain	Testing work of foam samples	M/s. UOP Gurgaon	Mar-12	2,72,993/-
2	Dr. V J Lakhera/ Prof. NK Shah/ Prof. S V Jain	Thermal Conductivity testing of foam samples	M/s. Robert Bosch Engineering & Business Solution Ltd., Bangalore	Mar-12	89,343/-
3	Dr. V J Lakhera/ Prof. NK Shah/ Prof. S V Jain	Thermal Conductivity test of air bubble type insulation (4 Samples)	M/s Aerolam Insulations Pvt. Ltd., Ahmedabad	Apr-12	40,450/-
4	Dr. V J Lakhera/ Prof. NK Shah/ Prof. S V Jain	Testing of thermal conductivity and fire properties.	M/s Jaisons Engg. Pune	Apr-12	28,400/-
5	Dr. V J Lakhera/ Prof. NK Shah/ Prof. S V Jain	Thermal Conductivity Testing	GBC India	Jul-12	10,112/-
6	Dr. V J Lakhera/ Prof. NK Shah/ Prof. S V Jain	Thermal Conductivity Testing, thickness of insulation and wire mesh	M/s. ONGC Ltd.	Aug-12	16,854/-
7	Dr. V J Lakhera/ Prof. NK Shah/ Prof. S V Jain	Thermal Conductivity Testing) Rs 50562/-	Lafarge Aggregates and Concrete India Pvt Ltd.	Aug-12	52,562/-
8	Dr. V J Lakhera/ Prof. NK Shah/ Prof. S V Jain	Thermal conductivity test	M/s Perlcon Premix Pvt Ltd.	Sep-12	12,000/-
9	Dr. V J Lakhera/ Prof. NK Shah/ Prof. S V Jain	Fire testing	M/s Aerolam Insulations Pvt. Ltd., Ahmedabad	0ct-12	13,400/-
10	Dr. V J Lakhera/ Prof. NK Shah/ Prof. S V Jain	Two samples for Thermal Conductivity Tes t	M/s Aerolam Insulations Pvt ltd.	Nov-12	25,000/-

Testing work

Sr. No.	Name of Company/ Organization	Title of the Work / Programme	Period	Grant (Rs.)		
1.	Mundra Port and Special Economic Zone Limiited, Mundra	Testing of oil and diesel samples	December -2011 to March 2012	1,08,000/-		
	Total:					

Testing work

Sr. No.	Name of Faculty Member(s)	Title of Testing work	Place and address of organization	Duration (dd/mm/yy)	Purpose /objective	Funding Agency	Outlay, Rs.
1	Dr. Dhaval Pujara Prof. Mehul Naik	Testing of microwave circuits using Vector Network Analyzer	Nirma University	10.01.2012	Testing of Microwave Components	Sumeru Microwave Communication Ltd. , Ahmedabad	12,000

Environmental Audit:

Sr.No.	Name of Company/ Organizati on	Grant (Rs.)
1.	Torrent Pharmaceuticlas, Mehsana	1,17,000
2.	CETP Zydus, Infrastructure Ltd.	88,800

III cell Report

Placement details

Campus placement has been one of the milestones of Nirma University. Placement of the students in the right kind of job opportunities is an endorsement of educational excellence in the respective field. 84% of eligible students who passed out from Institute of Technology, Nirma University have bagged lucrative offers from National and International recruiters.

So far the highest pay offered to the 2011-12 batch is about Rs.9.00 lacs per annum Average package offered this year is 4.74 lacs per annum. Companies that visited the campus are from diverse profiles like—IT, Electronics, Telecom, Pharmaceuticals, Market Research, and Consulting to Heavy Engineering, NGO, R&D and Design.

77 companies participated in the university placement process. Of these, more than 10 scouted for potential employees for the first time, in the campus

FACULTY DEPUTATIONS

Sr. No.	Name of Faculty Member(s)	Department	Deputed For & as Internal/ external/part- time	Name and address of Industry/ Institute/ Organization
1	Prof. B K Mawandiya	ME	Ph.D as Internal	IIT-Kharagpur
2	Prof. A M Lakdawala	ME	Ph.D Collage Teacher	IIT-Mumbai
3	Prof. V M Bhojavala	ME	Ph.D as External	SVNIT, Surat
4	Prof. M. T. Shah	Electrical Engineering	Ph. D (External)	Institute of Technology, Nirma University
5	Prof. P. N. Kapil	Electrical Engineering	Ph. D (External)	Institute of Technology, Nirma University



FACULTY ACHIEVEMENTS

Research Awards/Prize/Schemes

- Prof. Madhuri Bhavsar has successfully finished her Ph.D. work.
- Prof. Pooja Shah's Article titled "VANET simulation using FOSS" was published in June 2012 Issue of "LINUX 4 YOU" Magazine.
- Prof. Pooja Shah's Article titled "VANET simulation using FOSS (Part-II)" was published in August 2012 Issue of "LINUX 4 YOU" Magazine.
- Dr Madhuri Bhavsar, Associate Professor in CSE dept has been nominated and selected as a Secretary of ISTE Gujarat section for 3 years.
- Prof Ankit Thakkar of IT NU worked as a Paper Reviewer for the following International Journals :
- "Swarm and Evolutionary Computation" published by Science Direct.
- Advanced Smart Sensor Network System (IJASSN)"
- Wireless and Mobile Networks (IJWMN)"
- International Journal of Artificial Intelligence & Applications (IJAIA)
- Prof Ankit Thakkar of IT NU has worked as a Paper Reviewer for 4th "International Conference on Networks and Communications (NetCoM -2012)" to be held at Chennai, India during December 22-24, 2012
- Prof Ankit Thakkar of IT-NU was invited as session chair during The Second International Conference on Computational Science, Engineering Technology (CCSEIT-2012) which was held during October 26-28, 2012 at Avinashilingam University, Coimbatore, India.

Sr. No.	Name of Faculty Member	Recognition/ Honor/ Award	Reason for Recognition/Hono r/ Award	Name of Organization (from which it was received)
1	Workdone by Dr.S.S.Patel (Guide), Rachit Oza, Nikhil Shah	Outstanding Young Chemical Engineer Award (Second Position), March 2012	For outstading contribution in the field of chemical engineering	Indian Institute of Chemical Engineers (IIChE)
2	Prof. Neha Patni	EARTHIAN Face off Challenge -First Position for technical paper on "Wheat Gluten: a potential substitute for biodegradable plastics" Work done by Prof. Neha Patni (Guide) Vyoma maroo, Pujita yadava, Anisha Agarwal, January 2012	For first position in the national level competition	WIPRO

Faculty achievement

r	1			·
3	Dr. Shibu G. Pillai Dr A P Vyas	Editorial Board Member of Following International Journals Reviewer for the		1.International Journal of Chemical Engineering Research (IJChER) 2.International Journal of Chemistry and Applications (IJCA) 3.International Journal of Chemistry and Chemical Engineering (IJCCE) 4.International Journal of Nanotechnology and Applications (IJNA) 5.International Journal of Environmental Engineering and Management (IJEEM) 6. Nanotechnology and Nanoscience 1. Chemical Product and Process
		International journals mentioned		Modeling 2. Energy and Fuel 3.International Journal of Chemical Reactor Engineering 4. FUEL 5. Industrial and Engineering Chemistry Research 6. International Journal of Engineering, Science and Technology (IJEST) 7. Journal of Applied Research 8. Recent Patents on Chemical Engineering
5	Dr A P Vyas	Elected as a Fellow of Institution of Engineers (India) under Chemical Engineering Division. Number: F-117433-5 dated 31/10/2012	Contribution in the area of education and research in Chemical Engineering	Institution of Engineers (India), Kolkata
6	Prof.Femina Patel	Won first prize (International Award) worth Rs. 1,00,000/-	ECMA's learning initiative project competition	Emission Control Manufacturing Association, Delhi on Sept.4, 2012 at Hotel Eros Hilton, New Delhi.
7	Dr. Ankur Dwivedi	Member of Editorial / Advisory Board of		International journal of applied biology and pharmaceutical technology (IJABPT). (ISSN: ISSN 0976-4550)
8	Prof Femina Patel	Won second prize for ISTE - IPCL best M Tech Thesis in Chemical as a Guide	M.Tech Project	ISTE, New Delhi
9	Dr Sanjay Patel	ISTE Charutar Vidya Mandal Best Engineering College Teacher, Gujarat State	Engineering Teacher	ISTE, New Delhi

Sr No.	Name of Faculty	Details	Date
1	Dr. Chetna Chauhan	Second Prize(Oral) for the best research paper presentation at Regional Science Congress organized by The M.S.University of Baroda	15.09.2012

STUDENT ACHIEVEMENTS

Sr.	Name	Branch	Position and Sub Event	Main Event	Organized by
1.	Megha Agrawal	CE	1st in Best Essay, Action Plan and Exhibition	GIS'2012	National University Taiwan
2.	Priyanka Tripathi	МСА	published a paper	International Journal of Computer Applications Technology and Research	
3.	Nisarg Banglawala	CSE	won a gold medal in "Rangvarsha"	a national level drawing competition	Swastik School, Palanpur.

Number of students who have passed the following examinations (exams as applicable to respective institutes like: NET, SLET, CAT, TOEFL, GRE, G-MAT, IELTS, GATE, GPAT, ICMR)

Year of	Candidates Qualified in Competitive Exams							
Exam	NET	SLET	GATE	САТ	GRE/ TOFEL	GPAT		
2011	-	1	30	39	27			
2012	-	-	3	1	2			

Student Achievement:

Sr. No.	Name	Branch	Position and Sub Event	Main Event	Organized by
1	Mr. Yogesh Patel	Mech.	First Prize for 1500M run	Annual sports competition 2011-12	IT, NU
2	Mr. Himanshu Shah	Mech.	First prize for Carrom- Single	Annual sports competition 2011-12	IT, NU
3	Mr. Sa valia Akash Bhagvanjibahi, Mr. Tarda Sagar Gordhanbahi & Mr. Vachhani Jay Amrutlal	Mech.	First Prize for UG Project titled Design and fabrication of legged robot	UG Final best selected projects	IT, NU

Institute of Technology, Nirma University

4	Mr. Makwana Jigneshkumar Purusottamdas	Mech.	First Prize for PG Project titled Experimental Studies on Fluidized Bed Gasifier	PG Final selected best projects	IT, NU
5.	Mr. B.D. Tilva	Mech	First Prize for: Interscience Young Investigator Award for the paper "Numerical Transient Heat Transfer Analysis of Reactor for Magnesium Based Alloy for Hydrogen Storage Application"	International Conference on Mechanical and Industrial Engineering (ICMIE-2012) held at Goa	International Conference on Mechanical and Industrial Engineering (ICMIE- 2012) held at IRNet (India), Goa
6	Ms. Acharya Jignasha	Mech	First Prize for Cartooning	Vaudeville 2012	IT, NU
7	Mr. Samanani Vishal	Mech	First Prize for Elocution	Vaudeville 2012	IT, NU
8	Mr. Barve Ankit	Mech	First Prize for Solo	Vaudeville 2012	IT, NU
9	Mr. Bar ve Ankit Mr. Maheshwari Aditya Mr.Vasava Virendra Mr.Makwana Vrajeshkumar Mr. Shah. Jainil Mr. Patel Parth	Mech.	First Prize for Group Dance	Vaudeville 2012	IT, NU
10	Mr. Thakkar Nihar	Mech.	First Prize for Instrumental	Vaudeville 2012	Nirma University
11	Mr. Patel Neel Rukeshbhai	Mech.	Medal	Foundation Day	Nirma University

12	Mr. Korgaoker Saumil	Mech.	Medal	Foundation Day	Nirma University
13	Mr. Patel Kishan A.	Mech.	Medal	Foundation Day	Nirma University
14	Mr. Barve Ankit	Mech.	First Prize for Solo Dance	Foundation Day	Nirma University
15	Mr. Thakkar Nihar	Mech,	First Prize for Instrumental Singing	Foundation Day	Nirma University
16	SAE Team	Mech.	Received First Prize for Technology Innocation and Cash Award of Rs. 2 lacs	BAJA SAEINDIA 2012	BAJA SAEINDIA 2012 at Pithampur, MP
17	Team Robocon	Mech	First Runner UP at National Level in Robocon 2012	Robocon 2012	MAE Pune.
18	Candidates in GATE & GRE/TOFEL Exams.	Mech	7 students from the department qualified for GATE and 6 students qualified for GRE/TOFEL exams		

Student Achievements

Sr. No	Name	Branch	Position and Sub Event	Main Event	Organized by
1	Lakin K. Naik	Chemical,IT NU	A refresher course on distillation column	A refresher course on distillation column	SRICT,Anklesh war.
2	Parth Solanki	Chemical, ITNU	1 st ,Pyperozone	Chemology,NU Tech	Nirma University, Ahmedabad
3	Parth Solanki	Chemical, ITNU	Poster Presentation	Chemology,NU Tech	Nirma University, Ahmedabad
4	Parth Solanki	Chemical, ITNU	Water Desalination	Chemology,NU Tech	Nirma University, Ahmedabad
5	Umang Manasuriya	Chemical, ITNU	Poster Presentation	NU Tech	Nirma University, Ahmedabad
6	ravani dhairya	Chemical, ITNU	Chemology,NU TECH	Chemology,NU TECH	Nirma University, Ahmedabad
7	Neha Tripathi	Chemical, ITNU	Paper Presentation	Advancement in polymeric materials- APM	CIPET, Ahmedabad
8	Neha Tripathi	Chemical, ITNU	Water Desalination	Chemology NUTech	Nirma University, Ahmedabad
10	Parth Solanki	Chemical, ITNU	Chem-o-Car Chem-o-Jet	Chemology,NU Tech	Nirma University, Ahmedabad
11	Palakkumar Mehta	Chemical, ITNU	Paper Presentation	NU TECH	Nirma University, Ahmedabad
12	Palakkumar Mehta	Chemical, ITNU	Poster Presentation	NU TECH	Nirma University, Ahmedabad
13	Palakkumar Mehta	Chemical, ITNU	Paper Presentation	TECHVENTTURE	L.J. Institute of Technology, Ahmedabad
14	Neha Tripathi	Chemical, ITNU	Chemo-o-car chem-o-Jet	Chemology, NUTech	Nirma University, Ahmedabad
15	Mohamed Sufiyan	Chemical, ITNU	Paper Presentation	N U TECH	Nirma University, Ahmedabad
16	Mohamed Sufiyan	Chemical, ITNU	Paper Presentation	TECHVENTTURE	L.J. Institute of Technology, Ahmedabad
17	Prashansa Desai	Chemical, ITNU	3 rd ,poster presentation	FLARE	Pandit Deendayal Petroleum University,Ahmedabad

18	Pooja Dalwani	Chemical, ITNU	ChemE-Car- ChemO-Jet	Chemology,NUTe ch	Nirma University, Ahmedabad
19	Harshal Shah	Chemical, ITNU		NU TECH	Nirma University, Ahmedabad
20	Dhairya Ravani	Chemical, ITNU		NU TECH	Nirma University, Ahmedabad
25	Vyoma Maru	Chemical, ITNU	1 st ,Faceoff Challenge	WIPRO EARTHIAN	Wipro, Banglore
26	Vyoma Maru	Chemical, ITNU	Paper Presentation	WIPRO EARTHIAN	Wipro, Banglore
27	Pujita Yadav	Chemical, ITNU	1 st ,Faceoff Challenge	WIPRO EARTHIAN	Wipro, Banglore
28	Pujita Yadav	Chemical, ITNU	Paper Presentation	WIPRO EARTHIAN	Wipro, Banglore
29	Anisha Agrawal	Chemical, ITNU	1 st ,Faceoff Challenge	WIPRO EARTHIAN	Wipro, Banglore
30	Anisha Agraw al	Chemical, ITNU	Paper Presentation	WIPRO EARTHIAN	Wipro, Banglore
31	Shruti Agarwal	Chemical, ITNU	Paper Presentation	WIPRO EARTHIAN	Wipro, Banglore
32	Pooja Dalwani	Chemical, ITNU	1 st ,Paper Presentation	I-Fest'12	Nirma University, Ahmedabad
33	Palakkumar Mehta	Chemical, ITNU	2 nd ,Paper Presentation	I-Fest 12	Nirma University, Ahmedabad
34	Survashish Chattopadhay ay	Chemical, ITNU	2 nd , Paper Presentation	I-Fest 12	Nirma University, Ahmedabad
37	Smit Patel	Chemical, ITNU	1 st ,Chemvyapar	I-Fest	ISTE, Nirma University, Ahmedabad
38	Smit Patel	Chemical, ITNU	1 st ,Contraption	Flare	PDPU, Ahmedabad
39	Deep Vamja	Chemical, ITNU	1 st ,Chemvyapar	I-Fest	ISTE, Nirma University, Ahmedabad
40	Deep Vamja	Chemical, ITNU	1 st ,Contraption	Flare	PDPU, Ahmedabad
41	Divyanshu Kothari	Chemical, ITNU	1 st ,Chemvyapar	I-Fest	ISTE, Nirma University, Ahmedabad

Student Achievements

Sr. No.	Name	Branch	Position and Sub Event	Main Event	organized by
1	Mr. Dayneel Dalal (08BEC101)	EC	Article Published	Building Image Processing Embedded Systems using Python	Linux For You
	Mr. Sohail Patel (08BEC073) and Mr. Dayneel Dalal (08BEC101)		Project on Smart Homes Using Android	Droidcon 2012	
2	Mr. Sohail Patel (08BEC073)	EC	Runners Up	Google Code	Google
3	Ms. Prachi Patel (10BEC069)	EC	Late Nima Award	Spot Painting Competition	Karnavati Art Gallery
4	Arun Mohit-10BEC063 Mitul Vekariya - 10BEC062 Nagarsheth Parav - 10BEC066		Project Grant of \$500	Project Submission	IEEE

Sr. No	Name	Branch	Position and Sub Event	Main Event	Organized by
1.	Ms. Payal Raval	EE	Second	National Conference on Technology and Management (NCTM 2012)	Sankalchand Patel College of Engg. Visnagar
2.	Ravi Chaudhary	I&C	2 nd position, Taekwondo championship	District level Taekwondo Championship, July 15, 2012	

Bhumita Sarabhai, Student of Instrumentation & Control Department, IT – NU is selected for the prestigious ISA PMCD (Process Measurement and Control Division) Scholarship Award for the year 2012-2013 on July 3, 2012. She received \$500 towards her university tuition/fees

STUDENT CORNERS - ACTIVITIES (CO CURRICULAR)

Institute of Technology has established 15 Student's Organizations and Chapter of Technical Societies. These associations provide platform for building engineers to showcase their engineering talents, business acumen, and practical know-how of fundamental, along with their innovativeness. They carried different co-curricular and extra curricular activities throughout year. Each branch association were organizing an annual flagship event on national level till September 2011. From 2011 the Institute decided to organize a National Level Technical Symposium 'NuTECH' jointly by all the students' associations. Accordingly the Institute has organized NuTECH-2012 during February 16-18, 2012. It was inaugurated at the hands of Honourable Chief Minister of Gujarat State, Shri Narendrabhai Modi. There were approximately 2500 participants joined this technical extravaganza. The students also carried out social activities through Rotaract Club of Nirma University. The Chapters of Professional Academic Societies have conducted various academic enhancement activities to add to their professional growth. The students of the Institute have actively participated in the Foundation day celebration of Institute of Technology, Nirma University observed on 3rd October 2011. All associations have arranged Institute level activities encompassing sports, quizzes, workshops, fun zone etc.

Activities (co curricular):

- CSI Regional Student Convention 2012 is organised by CSI student Branch Nirma University on 24th and 25th Aug 2012 with more than 500 participants. The RSC included workshop on "Ethical Hacking " by Mr. Ankit Fadia, the Computer Security Consultant and a renowned hacker, attended both by students and faculties.
- An industrial visit was arranged for the students of M. Tech CSE, IT NU at EQDC, Gandhinagar on 7 November 2012.
- An industrial visit was arranged for students of B.Tech. CE,IT and MCA, IT NU during September 24-25, 2012 at BISAG(Bhaskaracharya Institute for Space Applications and Geo Informatics), Gandhinagar.
- An industrial visit was arranged for students of B.Tech. IT and MCA, IT NU on October 15,2012 at AirCell Limited, Ahmedabad.
- INFOCRATS has conducted workshop on ASP.Net on October 20,2012 for all the students of Institute of Technology, Nirma University who had registered for the event.
- INFOCRATS has conducted one day technical event "Trinity'12" on September 1, 2012 for all the students of Institute of Technology, Nirma University who had registered for the event.
- CSI had organized an event for spreading awareness about the recently launched Windows 8 on 5.9.12. Mr. Shreyansh Sharma,who is Campus Ambassador of Microsoft was the speaker of the said event.
- Workshop on Web-Hosting On the 9th of February, 2012, a "Workshop on Web-Hosting" was conducted by student of MCA under the Association of M.C.A Students (AMS) between 9:00 A.M. to 11:00 A.M. Divij Choudhry, Aamir Hakimand and Zahir Dhada students of MCA conducted the event.
- Alumini Meet oraganized by CSI Student Branch The member of CSI organized a meeting with Alumini of Department of CS&E, IT, NU on 12th January, 2012. The purpose of the meeting was to clear the doubts of the students and to guide students who wanted to study abroad in future.

Sr. No	Name of the Event	Objective	Audience
1	Participation in Charity walk	Fund collection and registration drive/ Extension	
2	NUTech	Technical Event	
3	Desi Olympics organized by MESA	To Promote Healthy Games	Students of the Nirma University
4	Workshop on "Robots"	Extension	organized for and at "Maharaja Agrasen Vidyalay", Ahmedabad
5	Autocalypse - 12	An automobile workshop for school studens	School Students
6	Blood donation camp	Social activity	

The Electronics and Communication Student Organization (ECO) is one of the most vibrant organizations on the campus of Nirma University. ECO is always involved in organizing various co-curricular activities for the students. During the period of July to December 2012 following major events were conducted by ECO.

Photoshop Workshop

A Photoshop Workshop was organized on 21st and 22nd of August, 2012. Total 91 students of different disciplines participated in that. It was mainly aimed to enlighten students about basic tools and techniques of photo editing using Adobe Photoshop. The basic tools such as Move, Select, Crop, Fill etc. were explained in details.

Social work

On the occasion of Independence day a small social activity was planned by ECO. On August 15, 2012 students of EC went to the Sahid Smarak at Sahibaug, Ahmedabad. The smarak that was built in to commemorate the sacrifices that the 71' and the Kargil War Jawans gave. People littering, throwing plastics, spitting and even doing objectionable things at such a place. ECO undertook a mass cleaning drive with a great support from a young businessman, Lalit Jain and a reputed NGO- YUVA UNSTOPPABLE to clean up the entire monument. Students cleaned that place with brooms. This ended with candle lighting in the memories of those along with a salute to the nation by singing the National Anthem.

Are U Smarter Then 7th Grader? (Quiz)

A Quiz was organized on 31st August, 2012 for the students of 1st, 2nd and 3rd year students. The quiz was a huge success, drawing around 90 teams and the crowd went into a salvo after seeing the questions. The quiz saw some brilliant answers by the teams and it was an open fight till the end, where one team grabbed the title by cracking the mega connect not far away from the runners up, who lost by a meagre 10 points. Overall it was a huge hit.

Extension Activity

Under the banner of extension activity EC, IT – NU organized a one day workshop for the children from 'Sarjan' – an NGO teaching to the students with weak financial background, on the campus of Nirma University on November 3, 2012. In the workshop students were given training on crafts making from cardboard and shortcuts for mathematics problems solving. They were also shown scientific videos to create their interest in the modern technology.



<u>Interface</u>

Extension Activity Organized by EC, IT – NU on November 3, 2012

EXTRA CURRICULAR ACTIVITY REPORT: Cultural Activities etc. (Sports Report for IT, NU)

According to the mission statement, Nirma University emphasis on the all-round development of students. Keeping the tradition the following major sports activities were organized in the year 2011-2012.

Student Organization	Name of the Event	Date of Organization	National/State/Institute
EESA	Ayun Ananada 13	August 4, 2012	Institute
EESA	Scintilla	October 20, 2012	State

Student corners – activities

- On February'24 the Free Training Session was arranged on following topics with lunch and transport for the 40 students of ITI, Saraspur.
 - Programmable Logic Controller: Introduction and Programming
 - Measuring Instruments and Analog Electronics Devices.
- Academic Initiatives:

NU-tech, 2012 comprised of various events, one of them was Roll-the-ball. A total of 32 teams, each consisting of 4 participants were selected who made various kinds of robots. Another technical and innovative event Flying Copter having a participation of 12 teams and where the team members had great fun competing eachother. A workshop on Simulink was also organized.

EXTRA CURRICULAR ACTIVITY REPORT

No. of Co-curricular activities organized

Chesa	EPL Quiz, Highway 7, Cinema Quiz, Manager	March 15-24, 2012	Institute
INFOCRATS	PHP workshop	March 24, 2012	Institute
MESA	MATHRIX-Regeneration (mathematical quiz)	March 26-27, 2012	Institute
ISTE	SIFAR	March 30-31, 2012	State

Sports Activity

Annual Sports Day: February 1-3, 2012.

The annual sports day for the year 2011-12 was arranged on February 1-3, 2012. The group sports events were organized during March 26 -31, 2012. Being the largest institute on campus, Institute of technology hosted the annual sports celebrations for the year 2012 and conducted more than 14 sport contests like long jump, high jump, disc throw, shot-put, chess, table-tennis, carom etc., where large number of students from Institute of Technology, Institute of Diploma Studies, Institute of pharmacy, Institute of Science and Institute of Law participated. The function was inaugurated by Dr. Ketan Patel, CMD Trico Pharmaceuticalsand was a grand success overall. Prof.Akash Mecwan worked as the coordinator of the sports day celebration under the guidance of Prof. Jayesh Patel, Chief coordinator, Sports Day 2012.

List of the events conducted on the Sports day is as below:

Individual Events:

- 100mts Running, 400mts Running, 800mts Running, 1500mts Running
- Long jump, High jump
- Shot put, Discus throw
- Chess, Carom, Table Tennis

Team Events:

- Tug of war
- Cricket
- Volley Ball
- Foot Ball
- Table Tennis

Institute of Technology Outperform in the sports meet. Annexure Ashows the list of winner from Institute of Technology.

M. Tech Cricket League (March - 2012):

Institute of Technology has various PG programs which are full of lectures, seminars, experiments and presentations etc. which makes students knowledgeable and practical engineers in their respective field so along with that it is desirable that one should have some extracurricular activity by means of sports. Institute of Technology, NU organized "M.Tech. Cricket League-2012"durilng March - 2012,which covered maximum participants from all PG streams.

The final match of the league was held on March 21, 2012, between M. Tech Civil Eng. and M. Tech VLSI Design. Team Civil won the final match.

Volley Ball Cup – 2012 (April - 2012):

The tournament Faculty Cup 2012 Volleyball was organized during April 2012. The final match was conducted on 26th April, 2012, with which the tournament came to an end. The runners-up team was Mechanical Engineering Department, while the winning team was Electronics & Communication Engineering Department.

Foot Ball Cup - 2012 (August - 2012)

The annual event of Football Tournament, Nirma Cup, between the branches of Institute of Technology was held from 7th August, 2012 to 27th September, 2012. Initially, Round Robin format of Group stages took place based on the teams divided at random. Team EC emerged as Winners of Group A, followed by Team CE. Whereas in Group B, Team IC, came out as Winners with Team Chem as Runners-up. In the Semi-Finals, EC faced Chemical and won by 3-1. In the other Semi final, Computer came through as 4-3 winners on penalty shootout against IC, after the match ended to a 0-0 draw. In the exciting finals, held under partial daylight, we witnessed a thrilling contest between EC and CE. After a long 80 minutes of gameplay and later on additional 10 minutes, EC scored in the penultimate minute to win 1-0 and retained their title, captained by Ishan Shah.

Volley Ball Tournament - 2012 (October - 2012):

The tournament Nirma Cup 2012 Volleyball was organized in the odd semester of the academic year 2012-2013 in the month from September to October 2012 All the matches took place with rules and regulations and there were no reports or complaints about mismanagement and discipline on the part of organizers and participating teams. The entire tournament was organized smoothly. The runners-up team was from Electronics Engineering Department, 7th Semester and the winning team was also from Electronics Engineering Department, 3th Semester, both from Institute of Technology, Nirma University. The final match was conducted on 17th October, 2012, with which the tournament came to an end.

Inter Institute Volleyball, Cricket & Football tournament:

Inter Institute football tournament was won by Institute of Technology, which was organized during 15th March 2012 – 23rd March 2012.

- (1) Fresher's Cup (Foot Ball) 2012: Inter Class Foot Ball tournament was organized exclusively for first year students in between March, 2012. The results will be available by the first week of April 2012.
- (2) Nirma Cup (Cricket) 2012: Inter Class Cricket tournament was organized in November 2011 and 7th semester students of IC branch won the tournament.
- (3) Faculty Cup (Cricket) 2012: Inter Branch tournament. Organized in March 2012. The results will be available by the first week of April 2012.

- (4) Fresher's Cup (Cricket) 2012: Inter Class Cricket tournament was organized exclusively for first year students in between March, 2012.
- (5) Nirma Basket Ball Cup 2012: Inter Branch Tournament was organized in March 2012.
- (6) M.Tech Cricket League 2012: Inter Class Cricket tournament was organized exclusively for PG students in between March 2012.

YOUTH WELFARE AND CULTURAL ACTIVITIES

Horizon '12

Horizon '12 was the biggest national level youth and cultural festival held at Nirma University from 9th-11th February, 2012. It was inaugurated on the morning of 9th February, 2012 at the hands of Shri Amitabh Shah, founder of NGO Yuva Unstoppable. A flurry of 4000 participants, with around 1000 on the spot registrations, Horizon '12 certainly exceeded all the barriers and provided an excellent platform for the students to excel. There were around 56 perfectly planned, managed and executed sub events relating to various themes like literature, arts, music, dance, theatrics, fashion, band performance, social awareness, debating, quizzing and many more.

The two amazing pro-nights conducted at the Nirma University, Amphitheatre on 10th and 11th February, 2012, saw a huge turn out from the fans of the performers. A blasting and power packed performance by internationally renowned DJ, DJ RINK left everyone spell bound on the 10th of February, 2012. The thirst for more excitement, fun and enjoyment was superseded by the shining performance of the queen bee of Bollywood, Sunidhi Chauhan.

Independence Day & Patriotic Song Competition

15th August, 2011 Celebration was arranged on Nirma Campus and Justice MR Shah, Honorable judge High Court of Gujarat was the chief guest. of the function. Patriotic song competition was also organized where in students from all the constituent colleges of Nirma University participated enthusiastically.

First Year Orientation:

Prof. H. K. Patel – Coordinator students' Activities, Institute of Technology, Nirma University delivered a Lecture on "Life outside the classroom- Students' Perspective on Extracurricular Activities" during the first year orientation programme during. The lecture was aimed to create the awareness about the importance of the extra curricular activities and was well responded by the students.

Freshers' Talent:

To boost the talent of Freshers' ISTE students' chapter was given the responsibility to organize Freshers' Talent exclusively for the 1st year B. Tech. students. It was organized in October 2011.

Inter institute cultural competition (Vaudeville):

Vaudeville - the annual Inter Institute cultural competition among all the Institutes of Nirma University was successfully organized on 20th -21st January 2012.

Republic day celebration:

26th January 2012 Celebration was arranged on Nirma Campus and Shri G.T.nanavati, Rtrd. Judge, Supreme Court., was invited as the Chief Guest of the function.

- No. of extra curricular activities organized in collaboration with other agencies on Campus
- Visit to the orphanage: Every year, ECO visits an orphanage, an old age home or a school for differently able children. This year the students visited the children of an orphanage of The Missionaries of Charity, run by the Mother Teresa trust, situated at Nava Vadaj, Ahmedabad.
- The members of CSI, ACES and INFORATS students association of Computer Science and Engineering Dept., had successfully conducted the "Computer Literacy Program" for the underprivileged children of Ahmedabad.
- The members of ISA Student Chapter (IC Department) visit to an old age home on the 26th January, 2012 near income-tax. They had bought some food items and spend times with people residing there.

• Performance in Sport activities

Students actively participated and secured prizes in various events of sports at institute and university level.

• Incentives to outstanding sports person

As the University has got the approval of Association of Indian Universities (AIU), there is no incentive policies framed for the outstanding sportsperson. In the near future such policies will be decided.

EXTRA CURRICULAR ACTIVITY REPORT:

Sr No	Title of programme	Type of Activity	Date/ Duration	Faculty Coordinator
1	Department Cultural programme	Cultural event	20/10/2012	Prof. Mihir Chauhan Prof. Ath. Singhal

• CSI students visited Hiramani Old Age home on 6th November with the purpose of celebrating Diwali joys.

• ACES, AMS, CSI, INFOCRATS jointly organised various social events under the banner of Gyan Jyoti'12 in the month of March 2012. The following are the details of the events conducted

Sr.	Event Name	Date	Conducted For	Number of Student
1	Computer literacy program	10-03-2012	Municipal school students	50 students participated in this event
2	Inspirational movie	17-03-2012	NGO students	50 students participated in this event

EXTRA CURRICULAR ACTIVITY REPORT: Cultural Activities etc

Sr. No.	Name	Branch	Position and Sub Event	Main Event	Organized by
1	Shivangi Singh	Chemical, ITNU	1 st ,Fresher Talent	Fresher Talent	Iste, Nirma University, Ahmedabad
2	Shivangi Singh	Chemical, ITNU	1 st , Age Of Chempires	NU-Tech	NU-TECH, Nirma University, Ahmedabad
3	Vivaan Shah	Chemical, ITNU	1 st ,Kenquest	Kenquest	Rotaract, Nirma University, Ahmedabad
4	Vivaan Shah	Chemical, ITNU	2 nd , Age Of Chempires	NU-Tech	NU-Tech, Nirma University, Ahmedabad
5	Priyanka Padman-Abhan	Chemical, ITNU	1 st ,Kenquest	Kenquest	Rotaract, Nirma University, Ahmedabad
6	Priyanka Padman-Abhan	Chemical, ITNU	2 nd , Isa	Sprintz	Nirma University, Ahmedabad
7	Aishwar-Ya Aloni	Chemical, ITNU	2 nd ,Isa	Sprintz	Nirma University, Ahmedabad
8	Neha Oswal	Chemical, ITNU	1 st , Age Of Chempires	NU-Tech	Nu-Tech, Nirma University, Ahmedabad
9	Deep Dama	Chemical, ITNU	1 st , Age Of Chempires	NU-Tech	Nu-Tech, Nirma University, Ahmedabad
10	Tapan Mehta	Chemical, ITNU	2 nd , Age Of Chempires	NU-Tech	Nu-Tech, Nirma University, Ahmedabad
11	Ayush Pareek	Chemical, ITNU	1 st , Age Of Chempires	NU-Tech	Nu-Tech, Nirma University, Ahmedabad
12	Ayush Pareek	Chemical, ITNU	2 nd , Highway No.7	Chesa	Chesa, Nirma University, Ahmedabad
13	Meet Kansara	Chemical, ITNU	2 nd , Age Of Chempires	NU-Tech	Nu-Tech, Nirma University, Ahmedabad
14	Harshit Chhaya	Chemical, ITNU	2 nd , Highway No.7	Chesa	Chesa, Nirma University, Ahmedabad
15	Vrunda Modi	Chemical, ITNU	1 st , Age Of Chempires	NU-Tech	Nu-Tech, Nirma University, Ahmedabad
16	Akhil Gupta	Chemical, ITNU	1 st ,Kenquest	Kenquest	Rotaract, Nirma University, Ahmedabad
17	Akhil Gupta	Chemical, ITNU	2 nd ,Isa	Sprintz	Isa, Nirma University, Ahmedabad
18	Akhil Gupta	Chemical, ITNU	2 nd , Age Of Chempires	NU-Tech	Nu-Tech, Nirma University, Ahmedabad

19	Akhil Gupta	Chemical, ITNU	3 rd , Triumph	Iste	Iste, Nirma University, Ahmedabad
20	Akhil Gupta	Chemical, ITNU	1 st , Taboo Charades	Horizon	Rotaract, Nirma University, Ahmedabad
21	Aman Kinger	Chemical, ITNU	3 rd , Trinity	Infocrat	Infocrat, Nirma University, Ahmedabad
22	Aman Kinger	Chemical, ITNU	2 nd , Highway No.7	Chesa	Chesa, Nirma University, Ahmedabad
23	Ram Mayur	Chemical, ITNU	2 nd ,1500m Race	Sports Day	Sports Day, Nirma University, Ahmedabad
24	Keshu Lakhotia	Chemical, ITNU	Ad-Making	Nu-Tech	Nu-Tech, Nirma University, Ahmedabad
25	Keshu Lakhotia	Chemical, ITNU	Ad-Making	Horizon 12	Rotaract, Nirma University, Ahmedabad
26	Keshu Lakhotia	Chemical, ITNU	Table Tennis Singles	Chesa Cup	Chesa, Nirma University, Ahmedabad
27	Sukriti Agrawal	Chemical, ITNU	Ad-Making	Horizon 12	Rotaract, Nirma University, Ahmedabad
28	Binoli Shah	Chemical, ITNU	Table Tennis Singles	Chesa Cup	Chesa, Nirma University, Ahmedabad
29	Binoli Shah	Chemical, ITNU	Group Singing	Inter-institute	Nirma University, Ahmedabad
30	Sahil Kotadia	Chemical, ITNU	Ad-Making	Horizon 12	Rotoract , Nirma University, Ahmedabad
31	Sahil Kotadia	Chemical, ITNU	Basketball	Chesa Cup	Chesa, Nirma University, Ahmedabad
32	Shivam Pandit	Chemical, ITNU	Ad Making	Horizon 12	Rotaract, Nirma University, Ahmedabad
33	Shivam Pandit	Chemical, ITNU	Table Tennis Singles	Chesa Cup	Chesa, Nirma University, Ahmedabad
34	Shivam Pandit	Chemical, ITNU	Ad Making	Nu-Tech	Nu Tech, Nirma University, Ahmedabad
35	Shivam Pandit	Chemical, ITNU	Group Singing	Inter-institute	Nirma University, Ahmedabad
36	Yash Patel	Chemical, ITNU	Table Tennis Singles	Chesa Cup	Chesa, Nirma University, Ahmedabad
37	Yash Patel	Chemical, ITNU	Basketball	Chesa Cup	Chesa, Nirma University, Ahmedabad
38	Vihang Bajoria	Chemical, ITNU	Basketball	Chesa Cup	Chesa, Nirma University, Ahmedabad

40	Parth Mehta	Chemical, ITNU	Music Instrument	Taraana	Nirma University, Ahmedabad
41	Dimpesh Gupta	Chemical, ITNU	3 rd ,Chemology, Ages Of Chempires		Nu Tech , Nirma University, Ahmedabad
42	Parth Raval	Chemical, ITNU	-	Leading Organisation & Event Organiser	"Nanhe Kadam" , Nirma University, Ahmedabad
43	Rutuja Shah	Chemical, ITNU	1 st , Roadies	I-Fest	ISTE, Nirma University, Ahmedabad
44	Aman Jain	Chemical, ITNU	2 nd , Roadies	I-Fest	ISTE, Nirma University, Ahmedabad
45	Shoumi Chakraborti	Chemical, ITNU	1 st , Classical vocal	Vaudeville	Nirma University, Ahmedabad
46	Pranali Mehta	Chemical, ITNU	2 nd , Rangoli	Vaudeville	Nirma University, Ahmedabad
47	Chandni Kela	Chemical, ITNU	2 nd , Rangoli	Vaudeville	Nirma University, Ahmedabad
48	Neha Oswal	Chemical, ITNU	2 nd , Rangoli	Vaudeville	Nirma University, Ahmedabad

The following are the events conducted under ChESA from July 2012 to till date

Name of the Event	Venue	Date
Potter –Mania	A-108, Nirma University, Ahmedabad	14-08-2012
InspirationMoviescreening	A-108, Nirma University, Ahmedabad	23-08-2012
Traffic awareness program	Helmetcharasta,Gurukul,Ahmedabad	14-08-2012
EliminationRoundFor "Fantasy De Franchise	C-Audi, Nirma University, Ahmedabad	05-09-2012
Final Round For "Fantasy DeFranchise"	A-101, Nirma University, Ahmedabad	07-09-2012

Traffic awareness program : Date: 14-08-2012

"Traffic awareness program" under JUNOON by ChESA on 14-08-2012 from 4:00-6:00pm was conducted near helmet charastha in Ahmedabad.

Foundation Day Event Under ChESA's social initiative group JUNOON:

On 3rd October 2012,the foundation day, 21 students and 2 teachers for government school in memnagar were invited to our college and were provided with breakfast, lunch and transport facilities. They also performed dance on stage and enjoyed a movie and a dental checkup was also conducted for them by a group of doctors from a dental college.

- EESA carried out an extension activity for Transformer Winder Trade Students of Industrial Training Institute, Sanand, Gujarat on March 01, 2012. This activity included basic construction and working of a transformer, types of windings, parallel operation of transformer etc. There were 16 students and 2 faculty members participating in this event.
- The members of Electrical Engineering Students' Association (EESA) went to Sri Sri Ravishankar Vidya Mandir, Ahmedabad on 27th September, 2012. The main aim of this activity was to impart basic education to the school children from slums. Children were motivated to bring out some talent such as dancing, singing, etc. Also, the members of EESA scripted a skit showing the importance of education in life and tried to inculcate good values in children.



Student Members of EESA at Sri Sri Ravishankar Vidya Mandir

• ISA students visited Old age home on March 17, 2012

• Social Initiatives

On January 26, 2012 ISA students visited an old age home where they donated food items. They also distributed sweets and clothes to the needy.

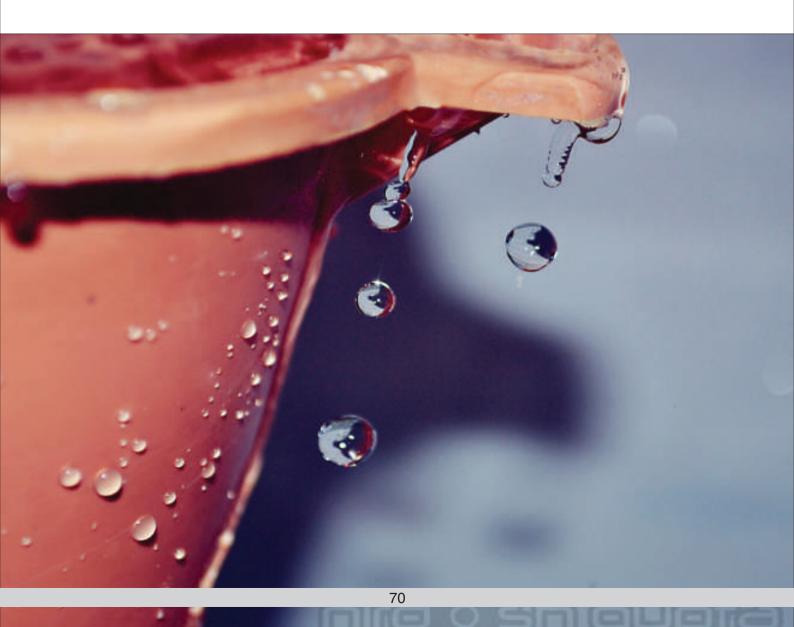
• Cultural Initiatives

Inter Institute Cultural festival was organized on January 20-21, 2012 students participated in various events and won first prize in 'Mime' and 'Rangoli'.

• Sports Initiatives

Sports day was organized on February 1-2, 2012 students participated in various events like Shot put, Discus throw, 100 m, 400 m, 800 m Run, Chess etc.

• Under the Guidance of Prof. H.K. Patel, the Faculty Advisor of Rotract Club of Nirma Institute, the students of NIRMA UNIVERSITY organized National level cultural event "HORIZAN-12" during February 2012.



RANKINGS AND AWARDS

Rankings

- Ranked 34th in Top 75 Engineering Colleges and 9th among self financed colleges across the country by Outlook Magazine in 2012
- Ranked 6th in Top 10 Engineering Colleges in Gujarat State as per the survey conducted by Careers 360 in 2012
- Ranked 50th in Top 100 Engineering colleges across the country as per the survey conducted by The Week in 2012
- The Institute has been ranked at 17th position in the DataQuest CMR T-School Survey 2012.
- Ranked 30th in Top 75 Engineering Colleges and 8th among self financed colleges across the country by Outlook Magazine in 2011
- Ranked 6th in Top 50 Engineering Colleges across the country, 6th in first top 10 talent hub colleges, 8th in top 10 technology hub colleges, 9th in top 10 international exposure and 8th in top 10 in Infrastructure colleges as per survey conducted in Electronics For You in May 2011
- Ranked 39th in Top 50 Engineering colleges across the country as per the survey conducted by Careers 360 in June 2011
- Ranked 18th in Top 110 engineering colleges across the country and ranked 2nd in Top engineering colleges of Excellence category by Competition Success Review-GHRDC Engineering College Survey in August 2011
- Institute is ranked 8th in Top 70 engineering colleges in 2011. Institute is ranked 5th and 2nd in 2010 & 2011 respectively among preferred engineering colleges in West Zone as per the survey conducted by The Week.

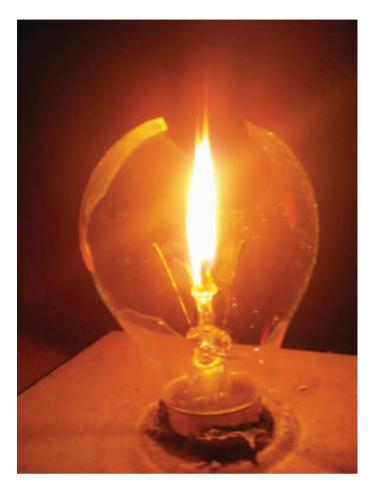
ISTE Awards

- National Awards for the Best Teacher in Gujarat state in year 2002, 2003, 2004, 2005, 2007, 2008, 2009, 2010 & 2012.
- Best Chapter Award for the year 2007-08, 2008-09, 2009-2010 & 2010-11, 2011-12.

- Best Student Chapter Award for the year 2003, 2005, 2006, 2007, 2010 and 2012
- Best M.Tech Thesis award in Chemical Engineering in the year 2012.
- 1st Prize Best M.Tech Thesis in Electrical & Electronics Engineering for the year 2011.
- GSFC National Award 2011 for Best M.Tech Thesis in Mechanical Engineering.
- National Award 2011 for Best B.Tech Student Projects in Civil Engineering and Instrumental & Control Engineering

Other Awards

- Students won national championship Doordarshan ROBOCON 2002, 2003, 2006, 2008, 2011 and 1st Runner-Up in ROBOCON 2012.
- A team consisting of students from EC, IC and Computer Engineering participated in the Freescale Cup competition organized by Freescale Semi-conductors and IISc, Bangalore and won 2nd Prize of Rs.1 lacs as prize money in 2012.
- Team of 3rd semester students of Chemical Engineering department won 1st prize for 'Earthian Face OFF Challenge" in Earthian Sustainability program for schools and colleges organized by Wipro in 2012
- Best Student Branch Award by Computer Society of India for the year 2011
- IEEE Student Branch, (WIE) Women in Engineering Affinity Group won the 2011 IEEE R10 (Region 10) WIE Section / Student Branch Affinity Group of The Year Awards with a cash bonus of US\$ 250 and a Certificate.











Campus Visit of Morari Bapu



Foundation Day

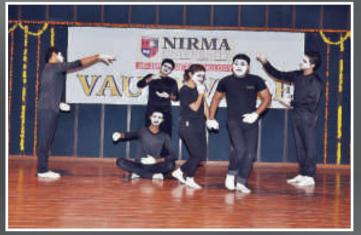


Republic day





Sports Day



VAUDEVILLE



VAUDEVILLE



Ramzat



INSTITUTE OF TECHNOLOGY NIRMA UNIVERSITY

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