

Department Association of Electronics and Communication Engineering 20

SPECTRUM News Letter



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#### **DR.MAHALINGAM COLLEGE OF ENGINEERING & TECHNOLOGY**

(AUTONOMOUS)

NPTC -MCET Campus, Udumalai Road, Pollachi-642 003.

Ph: 04259-236030/40/50;Fax:04259-236070.

#### **VISION OF THE INSTITUTE**

We develop a globally competitive workforce and entrepreneurs.

### **MISSION OF THE INSTITUTE**

Dr.Mahalingam College of Engineering and Technology, Pollachi endeavors to impart high quality, competency based technical education in Engineering and Technology to the younger generation with the required skills and abilities to face the challenging needs of the industry around the globe. This institution is also striving hard to attain a unique status in the international level by means of infrastructure, start-of-the-art computer facilities and techniques.

#### VISION OF THE DEPARTMENT

To strive for excellence in Electronics and Communication Engineering education, research and technological services imparting quality training to students, to make them competent and motivated Engineers.

#### **MISSION OF THE DEPARTMENT**

Department is committed to

- Impart quality engineering education in the areas of Electronics, Signal Processing, Embedded Systems and Communication Networks.
- Equip the students with professionalism and technical expertise to provide appropriate solutions to societal and industrial needs.
- Provide stimulating environment for continuously updated facilities to pursue research through creative thinking and team work.

#### **Programme Educational Objectives (PEOs)**

The graduates will:

**PEO1.** Actively apply technical and professional skills in engineering practices towards the progress of the organization in competitive and dynamic environment.

**PEO2.** Own their professional and personal development by continuous learning and apply the learning at work to create new knowledge.

**PEO3.** Conduct themselves in a responsible, professional and ethical manner supporting sustainable economic development which enhances the quality of life.

#### **Programme Outcomes (POs)**

Graduates of Electronics and Communication Engineering Programme will be able to

**PO 1.Engineering Knowledge:** Apply the knowledge of Mathematics, Science and engineering to solve problems in the field of Electronics& Communication Engineering.

**PO 2.Problem Analysis:** Identify, formulate/model, analyse and solve complex problems in the field of Electronics & Communication Engineering.

**PO 3.Design and Development:** Design an electronic system/component, or process to meet specific purpose with due consideration for economic, environmental, social, political, ethical, health and safety issues.

**PO 4.Conduct Investigations:** Design and conduct experiment, analyse and interpret data to provide valid conclusions in the field of Electronics and Communication Engineering.

**PO 5.Modern Tool Usage:** Apply appropriate techniques and modern software tools for design and analysis of Electronic systems with specified constraints.

**PO 6.Engineer and Society:** Apply contextual knowledge to provide engineering solutions with societal, professional & environmental responsibilities.

**PO7.Environment and Sustainability:** Provide sustainable solutions within societal and environmental contexts for problems related to Electronics & Communication Engineering.

PO 8.Ethics: Comply with code of conduct and professional ethics in engineering practices.

PO 9.Individual and Team work: Perform effectively as a member/leader in multidisciplinary teams.

**PO 10.Communication:** Communicate effectively to engineering community and society with proper aids and documents.

**PO 11.Project Management & Finance:** Demonstrate knowledge and understanding of the engineering and management principles to manage projects in multidisciplinary environment.

**PO 12.Lifelong Learning:** Recognise the need for, and have the ability to engage in independent and lifelong learning.

### INSPIRING...!

"Our pain may be the reason for somebody's laugh. But our laugh must never be the reason for somebody's pain."

This I read in FB and found it worth sharing.



Ex Indian President Dr. Abdul Kalam Says:

"When I was a kid, my Mom cooked food for us.

One night in particular when she had made dinner after a long hard day's work, Mom placed a plate of subzi (cooked vegetables) and extremely burnt roti(bread) in front of my Dad.

I was waiting to see if anyone noticed the burnt roti. But Dad just ate his roti and asked me how was my day at school.

I don't remember what I told him that night, but I do remember I heard Mom apologizing to Dad for the burnt roti.

And I'll never forget what he said: "Honey, I love burnt roti."

Later that night, I went to kiss Daddy, good night & I asked him if he really liked his roti burnt. He wrapped me in his arms & said:

"Your momma put in a long hard day at work today and she was really tired. And besides... A burnt roti never hurts anyone but HARSH WORDS DO!"

"You know beta(son) - life is full of imperfect things... & imperfect people..."

I'M NOT THE BEST & I AM HARDLY GOOD AT ANYTHING! I forget birthdays & anniversaries just like everyone else. What I've learnt over the years is: To Accept Each Others Faults & Choose To Celebrate Relationships"

Life Is Too Short To Wake Up With Regrets.

Love the people who treat you right & have compassion for the ones who don't.

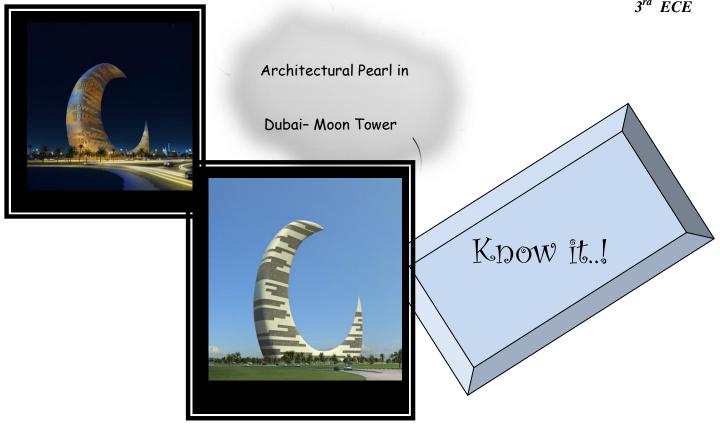
Don't make life much more complicated by hurting others!!!

## Why Complicate Life?

Missing somebody?	Call
Wanna meet up?	Invite
Wanna be understood?	Explain
Have questions?	Ask
Don't like something?	Say it
Like something?	State it
Want something?	Ask for it
Love someone?	Tell it

We just have one Life, Keep it Simple.

> SAVEETHA.V 3<sup>rd</sup> ECE



## PROJECT LOON

The project loon is a research and development project being developed by Google x with the mission of providing internet access to rural and remote areas. The project uses high altitude balloons placed in stratosphere at altitude of about 32 km to create an aerial wireless network with up to 3G like speed. The balloons are maneuvered by adjusting their altitudes to float to wind layer after identifying wind layer with the desired speed.

Uses of the service connect to the balloon network using a special internet antenna attached to their building. The signal travels through the balloon network from balloon to balloon, then to a ground based station connected to a internet service provider, then on to the global internet. Initially, the balloons communicate using unlicensed 2.4 and 5.8 GHz ISM band, and Google claims that the set up allows it to deliver "speeds comparable to 3G" to users, but they then switched to LTE with cellular spectrum by cooperating with local telecommunication operators. The first person to connect to "the Google balloon internet" after the initial test balloons were launched into the stratosphere was farmer in the town of leeston, Newzealand.

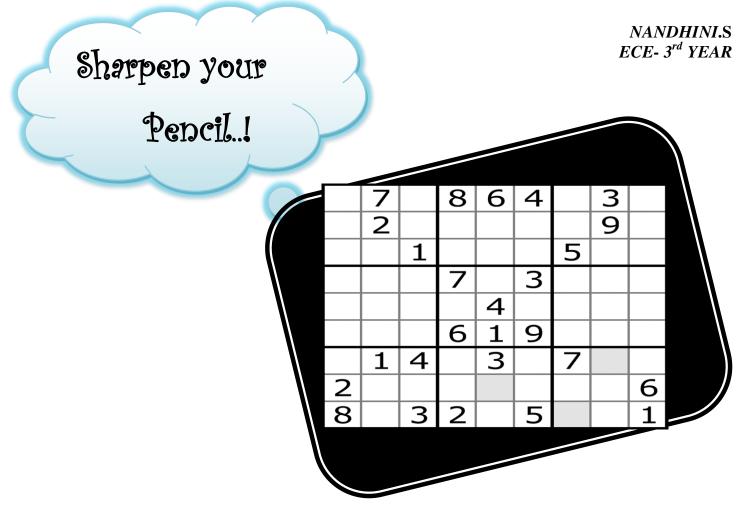
The balloon envelope used in the project are composed of polyethylene plastic. The balloons are super pressure balloons filled with helium. A small box weighing 10 Kg containing each balloon's electronic equipment hangs underneath the inflated envelope. This box contains circuit boards, radio antennas, ubiquiti networks rocket and batteries.



Quote box

The secret of getting ahead is getting started... -Mark Twain





#### PRODIGIOUS TECHNOLOGY

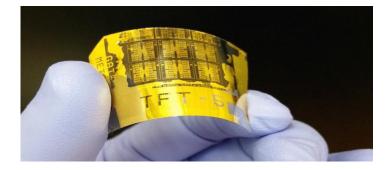
The waste management play a vital role in todays environment. To acquire a pollution free atmosphere and to make our globe to reach the future generation, managing the waste is very much important. Taking this situation into account China's capital Beijing has come up with an ingenious idea to encourage people to recycle more. Recycling becomes fun when there are rewards involved. The subway ride in Beijing is paid by recycling a plastic bottle. It has installed 34 "reverse" vending machines in subway stations throughout the city. When a passerby inserts an empty plastic bottle, the machine's sensor scans it to assess the value of the plastic – anywhere from 5 to 15 cents - and spits out a public transportation credit or extra mobile phone minutes. The reward is commensurate with the quality and number of bottles being fed into the machine, although there is also the option for people such as tourists, who don't need the rewards, to insert bottles anyways. Most of the recycling machines, according to Recycling Today, are placed in high-traffic or touristy areas, such as the Temple of Heaven in Beiging, which sees as many as 60,000 people pass by daily. When you consider that most people have a plastic bottle of something in their hands, whether it's water or soda, that's a whole lot of plastic that city officials don't want to see littered on the ground. This system, with its free rewards, makes

recycling more appealing, and is a good step forward for a city that's already notorious for its environmental degradation. The idea is catching on. Also in Sydney, where "beverage containers now outstrip cigarette butts as the most littered item," the city officials placed Envirobank reverse vending machines throughout the city, The rewards are nice - food truck vouchers, tickets to the city's famous New Year's Eve party, movie tickets and bus passes. Unlike traditional recycling bins, where people would throw regular garbage and contaminate the recycling, making it hard or impossible to process, this machine only fits plastic bottles and soda cans. Because it immediately crushes them, each Envirobank can hold up to 3,000 items. While I think these initiatives are great, they don't really solve the bigger issue of disposable plastic. Recycling, as useful and good as it can be, is not an ideal solution. Plastic can never be fully recycled, but is always 'down-cycled' into a lesser form of itself until it cannot be reworked and eventually gets landfilled. The most important task is to educate people about the importance of reusability, and get people off their addictions to bottled water and soda and onto using reusable bottles and cups.If this technology is implemented in developing nations such as India, ample amount of waste can be reduced

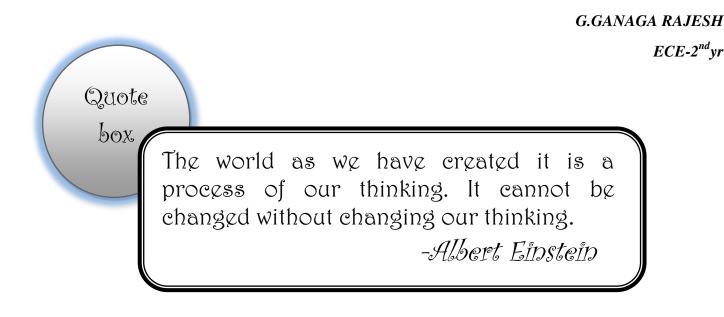


### FLEXIBLE PHOTOTRANSISTOR

"We actually can make the curve any shape we like to fit the optical system."



The flexible phototransistor could improve the performance of myriad products — ranging from digital cameras, night-vision goggles and smoke detectors to surveillance systems and satellites — that rely on electronic light sensors. Integrated into a digital camera lens, for example, it could reduce bulkiness and boost both the acquisition speed and quality of video or still photos. Like human eyes, phototransistors essentially sense and collect light, then convert that light into an electrical charge proportional to its intensity and wavelength. In the case of our eyes, the electrical impulses transmit the image to the brain. In a digital camera, that electrical charge becomes the long string of 1s and 0s that create the digital image. While many phototransistors are fabricated on rigid surfaces, and therefore are flat, Ma and Seo's are flexible, meaning they more easily mimic the behavior of mammalian eyes. One important aspect of the success of the new phototransistors is the researchers' innovative "flip-transfer" fabrication method, in which their final step is to invert the finished phototransistor onto a plastic substrate. At that point, a reflective metal layer is on the bottom. "In this structure — unlike other photo detectors — light absorption in an ultrathin silicon layer can be much more efficient because light is not blocked by any metal layers or other materials," Ma says. The researchers also placed electrodes under the phototransistor's ultrathin Silicon Nano membrane layer — and the metal layer and electrodes each act as reflectors and improve light absorption without the need for an external amplifier. There's a built-in capability to sense weak light, and this flexible phototransistors open the door of possibility. This demonstration shows great potential in high-performance and flexible photo detection systems, whose work was supported by the U.S.Air force. "It shows the capabilities of high-sensitivity photo detection and stable performance under bending conditions, which have never been achieved at the same time

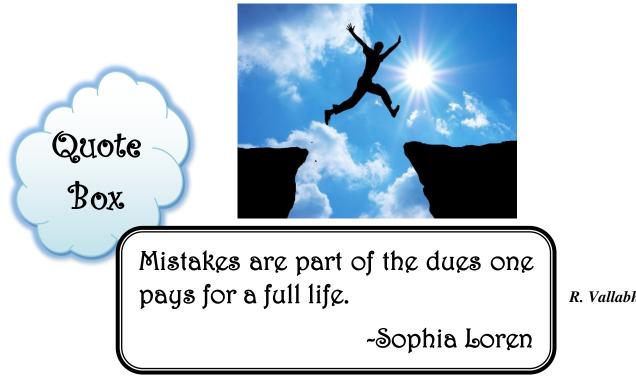


### IF YOU DON'T DO MISTAKES, YOU CAN'T DO ANYTHING...

### *"Always remember you are braver than you believe, stronger than you seem and smarter than you think."*

I found dumbstruck when I came across a statistics. The statistics show that India has the highest suicide rate in the world. 21 out of one lakh people are dying by attempting suicide. The age group that is committing suicide is between 15 & 35. Nearly everyone goes through a time in life which we experience depression. Whether it's unfavorable environmental factor, traumatic experience or dealing with mental illness, depression has become very common. The inability to cope with depression or challenge is what leads most people to become suicidal-they believe there is hope for their current situation. "Did you really want to die? No one commits suicide because they want to stop the pain. Then why do they do it? Because they couldn't face the pain." Due to failure in examinations, Number of suicides in 2012 is 2010, in 2013 it is 2479, in 2014 it is 2381. It shows that more and more students are taking extreme step of suicide in a bid to end the misery after falling in pursuit of professional excellence. Life is nothing if it is not lived. Life is nothing if it is not experienced and

investigated to its fullest potential. What I feel for the reason of suicide is lack of self-confidence, lack of belief, lack of hopelessness, the fear of failure and the inability to learn failure. So many people don't try something new to move towards their goal out of a fear of making mistakes. Elbert Hubbard said. "the greatest mistake you make in life is to be continually fearing you will make the one". I would like to give a pretty simple formula, mistakes really Make + Learn from them=Success. Edition and many other scientists achieve everything from learning from their mistakes. I can give story after story. A failure only turns into success if you slice it as thinly as possible. And study the taste and texture of every slice. Think that you are going to die. I may be right or wrong. It doesn't matter. So break the rules. Become the criminal of your life where you move beyond the edge you thought possible. Become authentic and honest. Do it before you die. Be courageous. Make a mistake and learn from it. Learn at your habits and change them. Move closer to the success. Live bold and bloom.



R. Vallabha Shanmathi 3<sup>rd</sup> ECE - B

### ATTITUDE

#### 'GET SPECIFIC, PLAN YOUR WORK AND WORK THE PLAN'.

Most of us used to say "attitude is everything". What does the term attitude mean? Each of us has a mental frame work which we use to frame our view of life. This is a part of our personality known as attitude. It is how you see the things around you, how you deal with the situations, and what you think about life. It is the overall orientation of mind, a fundamental mindset that is with your life. Think of it as the lens through which you see your life unfolding.

The difference between positive and negative attitude could be the difference between positive and negative life. Your attitude is your control. The company you keep impacts your attitude. Seldom will you find a group of negative thinkers and one positive attitude together. When you focus on treating others positively with respect, you will receive the same treatment. Change the focus from yourself. And try something new and creative. It doesn't matter what you are trying to accomplish, the chances are that someone has done it.

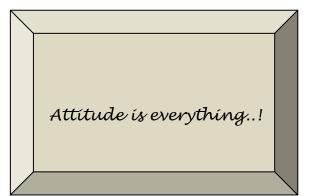
Being an optimist for others can help you to see the positive things in your own life. Your attitude sits alongside your other major personality components-the goal and the mode. Your attitude is how you interrupt your life experiences. We all have to deal with those negative inner voices that tell us we are not good enough, we will never be loved or we are not entitled to happiness. If you want confidence, you have to take on a confident posture. Knowing you want a better attitude may not be enough.

#### PAVITHRA

ECE-2<sup>nd</sup> Year



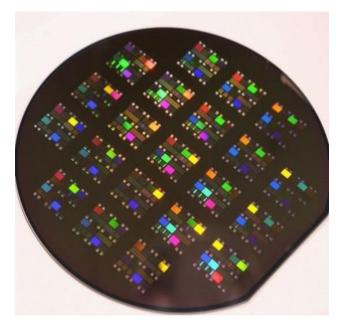
World's Ugliest Women-Lizzie Velasquez



#### GEARING UP THE NANO ELECTRONICS INDUSTRY

An invention by the Bangalore based IISC is all set to make the inroads into billon dollar Nano electronics industry. This is amazing because the technology can drastically reduce the cost of the existing state of the art e-beam lithography and optical lithography .This invention is a new way to etch thin lines on a substrate using electrodes, termed electro lithography.

This will come in very useful in inscribing, for instance, nanometer scale circuits which make up an IC chips, minute transistors among others. Once developed into prototypes, this technique principle reduce the cost of the equipment used presently about five crores rupees per to merely 15-20 lakhs. This would come in useful not just in the industry but in academic too, with more colleges being able to afford research in nanotechnology.



The people behind this are DR.Praveenkumar Department of materials engineering, Prof.Rudrapratap ,chairperson of nano science and engineering and santanu a, Phd student. Once this technology is developed into prototype for commercial use even surpass, the existing state-of-the art technology and break into the millon dollar, nanoelctronics industry,

Since it does not require high currents or vaccum atmosphere. It is a relatively more environment friendly method than the existing ones. The group has fiiled for the patent possibilities. In the process of taking their invention from the lab into industry, the scientists will have to recruit

mechanical and many electronics engineers to help them develop the prototype.

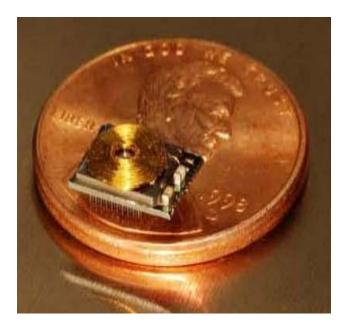
Technically the main steps they have to take will be putting the whole assembly onto black box , which can be easily operated using the proverbial 'PUSHBUTTON'.

The usual challenges of getting people to adopt it may not be difficult as IISC organizes various workshops, attended by academicians as well as people from industry, where the product may be showcased .Not just that , the center for Nano science and Engineering at IISC, has several industry affiliates who can understand the power of the invention and communicate its worth to others .

The process of lithography is straight forward; take the transparent glass plate coat it with suitable polymer.

On top of this add a layer of chromium, and then you dig a trench of the desired pattern on the chromium layer, so that parts of the polymer layer are exposed. Using acetone, dissolve the exposed polymer and remove these parts of it. This caused gap to be formed in the polymer –chromium sandwich.

This whole assemblage functions like the negative of the developed photo film. Now, if the metal of choice is 'sputtered' on to this sandwich, it will go and occupy the gap that has been created and directly fall on the glass plate. In this way, the desired pattern will have a width equal to the width of the trench and thickness equal to the polymer layer.



The crucial difference between the existing and the new ones are digging of the trench. Here, the researchers use electrodes that are widely separated from each other the very thin cathode, when it moves like the nib over the chromium layer causes the metal to heat up, and dissolves and flow out .This makes a trench whose width is nearly that of the electrode dip.

Other techniques the e-beam lithography which is very popular and optical lithography which involves crores of rupees, whereas this setup could assemble at a cost of 20 lakhs.

THUS THIS TECHNOLOGY REVOLUTIONIZE THE NANO TECH INDUSTRIES

#### JEBASEELAN RAVI.K

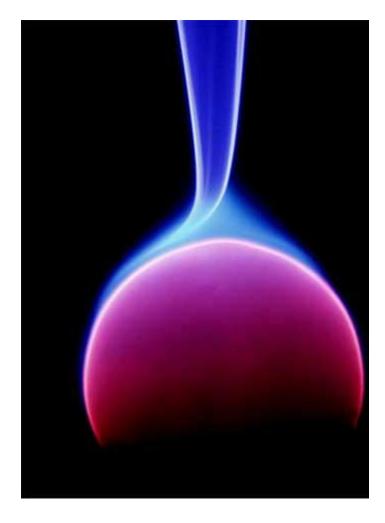
ECE-2<sup>nd</sup> Year



#### FUTURE ENERGY

It's no secret that our world is running out of fossil fuels. Peak oil, unrest in the Middle East and hostile nations in other locations put our energy future at risk. This is why finding and harnessing future energy is so important.

What many people fail to realize, however, is that energy sources surround us on Earth and throughout the universe. In fact, the energy now that Mother Nature supplies us is staggering and we cannot at present make use of 1/1000th of what we are given on a daily basis.



Future energy is also happening around all of us right now. For instance, the sun is an obvious source of energy now and in the future and we are only partaking of a small pittance of this resource. The same goes for wind energy, ocean, tidal, hydro, and micro hydro and geothermal. These renewable Resources will be important sources for future energy if we are to survive as a species.

But, let's dig a little deeper since these do no scratch the surface when it comes to harnessing and taking advantage of all of the natural power that Mother Nature has to offer. In the next 30 years, scientists, researchers and engineers will have figured out how to harness the power and provide future energy generated by tornadoes, volcanoes, hurricanes, rogue waves, the gulfstream, the jet stream, earthquakes and tremors and lightning strikes.

The so-called natural disasters of today will still exist but there will be an added component of natural energy opportunities as well. Do you think this is a stretch?

Researchers are already working on sturdy wind turbines that can capture wind speeds of over 100 mph for use around the Gulf Coast during hurricane season. A company called Wind Hunter is building a ship filled with wind turbines to chase gusts at sea and turn the wind energy into electricity, electrolyze sea water to produce hydrogen for fuel cells.

Everything I've mentioned is what scientists and researchers are currently working on in order to produce future energy. But, yes, a couple of breakthroughs in technology will be needed for several of these items to happen.

Yet, I don't want to confine this list of what researchers are currently working on. Future energy will involve many different methods and devices from many different sources.

Here are just a few additional sources of future energy:

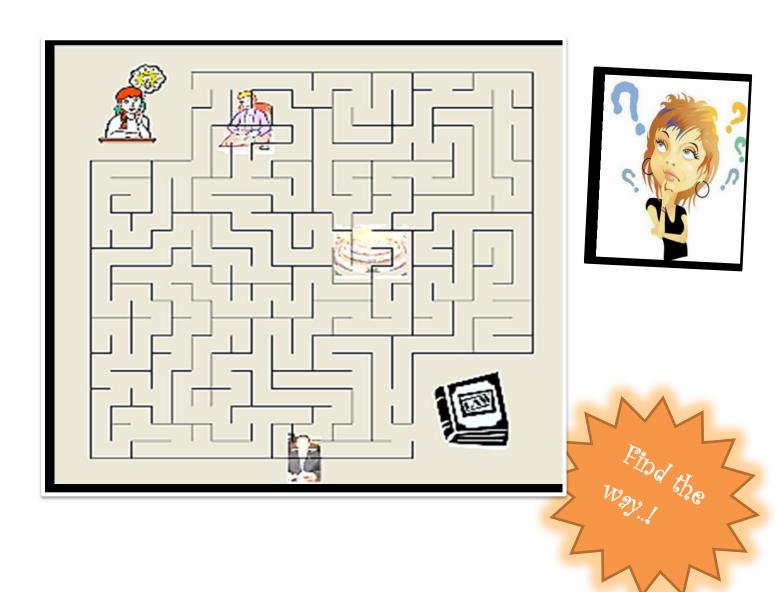
- Gravity
- Anti-gravity
- Magnetism

- Electromagnetism
- Brown's Gas / HHO (hydrogen plus oxygen)
- Cold fusion
- Plasma
- Nuclear
- Alternative Fuels
- Waste to energy
- Unknown future energy sources

Now, there may never be any true perpetual motion machines built, not in our lifetimes and certainly not for centuries to come if ever. What will be built however is near perpetual energy machines that once started will produce future energy for a very long time before fading out.

The promise of cold fusion is one such resource for future energy that we will rely on more heavily through the decades once several breakthroughs and finally disruptive technology blasts onto the scene. An Italian engineer Andrea Rossi has already run a successful test of a cold fusion machine. The Lawrence Livermore National Laboratory is using the world's largest laser array to start a cold fusion reaction. In fact, every first world nation (and some other countries like North Korea) is working on cold fusion technology as a resource for future energy.

#### T.VIVEHAMITHRAN ECE-2<sup>nd</sup> Year



#### LIGHT SPEED- NANOTECH

Graphene, a one-atom-thick sheet of carbon, was discovered in 2004 and is considered a potential heir to copper and silicon as the fundamental building blocks of Nano electronics.

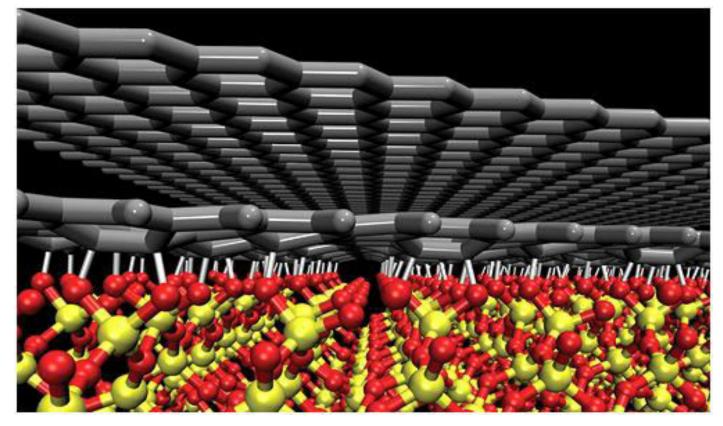
With help from an underlying substrate, researchers for the first time have demonstrated the ability to control the nature of graphene. SarojNayak, an associate professor in Rensselaer's Department of Physics, Applied Physics, and Astronomy, along with Philip Shemella, a post-doctoral research associate in the same department, have determined that the chemistry of the surface on which graphene is deposited plays a key role in shaping the material's conductive properties. The results are based on largescale quantum mechanical simulations.

Results show that when deposited on a surface treated with oxygen, graphene exhibits semiconductor properties. When deposited on a material treated with hydrogen, however, graphene exhibits metallic properties.

"Depending on the chemistry of the surface, we can control the nature of the graphene to be metallic or semiconductor," Nayak said. "Essentially, we are 'tuning' the electrical properties of material to suit our needs."

Conventionally, whenever a batch of graphene nanostructures is produced, some of the graphene is metallic, while the rest is semiconductor. It would be nearly impossible to separate the two on a large scale, Nayak said, yet realizing new graphene devices would require that they be comprised solely of metallic or semiconductor graphene. The new method for "tuning" the nature of graphene is a key step to making this possible, he said.

Graphene's excellent conductive properties make it attractive to researchers. Even at room temperature, electrons pass through the material effortlessly, near the speed of light and with little resistance. This means a graphene interconnect would likely stay much cooler than a copper interconnect of the same size. Cooler is better, as heat produced by interconnects can have negative effects on both a computer chip's speed and performance.



NIVILAH JERISHMA G FINAL- ECE

#### RASPBERRY PI TECHNOLOGY

#### "TECHNOLOGY LIKE ART IS A SOARING EXERCISE OF THE HUMAN IMAGINATION."

#### -DANIEL BELL

Computer is not only a luxury but also a necessity for every person in today's world. Raspberry pi is a credit-card sized computer aimed at providing a computer to every person in the world. Raspberry Pi is intended to provide a base on which kids can learn programming while enthusiasts can do different types of commercial programming. It serves as an efficient base due to its low cost and the number of interfaces available. The Raspberry Pi can be used instead of a personal computer, but with some limitations due to its limited processing power.

The main purpose of designing the raspberry pi board is to encourage learning, experimentation and innovation for school level students. The raspberry pi board is a portable and low cost. Maximum of the raspberry pi computers is used in mobile phones. It enables people of all ages to explore computing, learn programming languages like Python and can be used for many tasks that a computer does, like games, browsing internet, word processing, spreadsheets and also playing video. It is used in programming concepts and hardware interfacing. It's used for making digital photo frames, tablets etc. It is used in robotics for controlling motions, sensors, etc. It can be used in creating and handling of small servers. It can be used in voice activated coffee machine. It's used in automated system to detect leakage from microwave oven.

Due to its size, it can be hidden anywhere, behind television sets, within walls. It provides basic computer functions like word processing, web browsing .It has many disadvantages (i.e..,) though it can be used as a computer but it is closer to a mobile device. Since it is not covered with any case, it is exposed and can be touched easily which can cause damage. It is time consuming to download and install software and is unable to do complex multitasking.

Raspberry pi helps to increase hardware knowledge and software applications related to it. Raspberry pi is an amazing piece of hardware because of the combination of the features of a traditional computer and an embedded device.

> SAKTHI.K ECE-2<sup>nd</sup> Year









ECE-1<sup>st</sup> Year







T.Vinu dharani ECE 1<sup>st</sup> year



Balasubramanian ECE 1<sup>st</sup> year



## Click-o-click









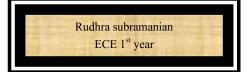
























கவிதைத் துளிகள்

### <u>அம்மா</u>

நான் வாழ, நீவாழ வேண்டும்..! சிப்பிக்குள்ளே முத்திருக்குமாம் - ஆனால் ஒரு முத்துக்குள்ளே நான் இருந்தேன் பத்து மாதங்கள் மட்டுமே! உள்ளுக்குள்ளே ஒட்டிக்கொள்ள ஆசை என்ற போதிதும் என்னைக் காண நீ ஏங்குவதைத் தாளாமல் வெளிவந்து விட்டேன்! நெஞ்சருகே நீ இருக்க நிம்மதிக்குப் பஞ்சமில்லை! உன்னருகே நான் இருக்க ஓர்யுகம் தேவையில்லை! கண்ணுக்குள்ளே நீ இருக்க கனவுக்கு வேலையில்லை! கவிதைகள் தேவையில்லை! கண்களில் ஈரமில்லை! நேசிக்க உன்னை அன்றி எனக்கொன்று யாருமில்லை! நீயும் என்னை நீங்கிவிட்டால் சுவாசிக்க ஆசையில்லை!



## <u>பிறந்த நாள்</u>

என் வாழ்வில் வந்த வசந்த ஓவியமான ஒரு நொடி நான் இந்த உலகில் பூமகளாக அவதறித்து, என் தாய் அவள் கையால் என்னை பூமலராய் தாங்கிய நாள் (என் பிறந்த நாள்)



# நம்பி வாழ்...!

வாழ்வில் தோல்வி அதிகம் வெற்றி குறைவு என வருந்தாதே... செடியில் இலைகள் அதிகம் இருந்தாலும், அதில் பூக்கும் ஒரு சில மலருக்கே மதிப்பு அதிகம்...! வெற்றி வந்தால் பணிவு அவசியம் தோல்வி வந்தால் பொருமை அவசியம் எதிர்ப்பு வந்தால் துணிவு அவசியம் எது வந்தாலும் நம்பிக்கை அவசியம்.... கஷ்டப்படுபவனுக்கு சிரிப்பு தெரியாது

சிரிக்கின்றவனுக்கு கஷ்டம் தெரியாது கஷ்டத்திலும் சிரிக்கின்றவனுக்கு தோல்வியே கிடையாது....!



# AS THE DAY GOES

Choices and wrong turns are made As the day goes and sun fades People are lord and hearts are broken As the day goes and words are spoken Smiles and flowns are shown on faces As the day goes and children play in open spaces Happiness and sadness are felt by all As the day goes and night falls Teams of joy and tears of pain are shed As the day goes and all are in bed



## Stepping stone

You'll never be brave If you don't get heart You'll never learn If you don't make mistakes You'll never be successful If you don't encounter failure..!

Life lives, life dies Life laughs, life cries Life gives up, life tries But life looks different Through anyone eyes...!

### Still I Rise

You may write me down in history With your bitter, twisted lies, You may tread me in the very dirt But still, like dust, I'll rise.

Does my sassiness upset you? Why are you beset with gloom? 'Cause I walk like I've got oil wells Pumping in my living room.

Just like moons and like suns, With the certainty of tides, Just like hopes springing high, Still I'll rise.

Did you want to see me broken? Bowed head and lowered eyes? Shoulders falling down like teardrops. Weakened by my soulful cries.

Does my haughtiness offend you? Don't you take it awful hard 'Cause I laugh like I've got gold mines Diggin' in my own back yard.

You may shoot me with your words, You may cut me with your eyes, You may kill me with your hatefulness, But still, like air, I'll rise.

Out of the huts of history's shame I rise Up from a past that's rooted in pain I rise I'm a black ocean, leaping and wide, Welling and swelling I bear in the tide. Leaving behind nights of terror and fear I rise Into a daybreak that's wondrously clear I rise Bringing the gifts that my ancestors gave, I am the dream and the hope of the slave. I rise I rise I rise

I rise.







## Events



*"SPECTRUM"* the Association of Electronics and Communication, on behalf of our Department conducted a GUEST LECTURE on the topic *"Phased array antennas for RADAR application"* by **M.Muthukumar**, Air Bus Defence and Space, Bangalore for our department 3rd year students on **09.01.2016** at New Seminar Hall.



**"SPECTRUM"** the Association of Electronics and Communication, on behalf of our Department conducted a GUEST LECTURE on the topic **"Recent trends on VoIP"** by **N.Prakash**, Managing director of Asterfone technologies, Chennai for our department 3rd year students on **27.02.2016** at New Seminar Hall.



*"SPECTRUM"* the Association of Electronics and Communication, on behalf of our Department conducted a **Mr.Holmes** event during UDDESHAH'16for other college students on **11.03.2016** 

## Placement details

SI no Company name		No of Students	
1	INFOSYS LTD	29	
2	L&T INFOTECH	10	
3	NTT DATA	9	
4	POLARIS	7	
5	TECH MAHINDRA	2	
6	ROBERT BOSCH	1	
7	VVDN	1	
8	HP	1	
9	UST Global	2	
10	BURNING GLASS	1	
11	SMARTDV TECHNOLOGIES	4	
12	APPASAMY ASSOCIATES 1		
13	3 GEMINI COMMUNICATIONS 3		
14	4 SUTHERLAND GLOBAL SERVICES 3		
15	CARESOFT GLOBAL	3	
16	CTS	1	
17	7 E-WAVE NETWORKS 8		
18	CMS IT SERVICES 1		
19	SERVION GLOBAL SOLUTIONS	1	
	TOTAL NO OF STUDENTS	84	

	IV-ECE-2016 batch		
Sl no	Roll no	Name	Company name
1	12BEC012	S.ARULMOZHI	INFOSYS LTD
2	12BEC016	G.BHARATH KUMAR	INFOSYS LTD
3	12BEC019	G.DHARANI RAJA	INFOSYS LTD
4	12BEC023	V.GANDHIMATHI	INFOSYS LTD
5	12BEC025	J.GAYATIRI	INFOSYS LTD
6	12BEC036	T.JANANI	INFOSYS LTD
7	12BEC038	T.KANAGARATHNAVELU	INFOSYS LTD
8	12BEC040	U.KANDHAR VISHNU	INFOSYS LTD
9	12BEC042	T.KAVITHA	INFOSYS LTD
10	12BEC043	P.KAVIYA	INFOSYS LTD
11	12BEC046	R.KIRUTHIKA	INFOSYS LTD
12	12BEC047	S.KIRUTHIKA	INFOSYS LTD
13	12BEC050	M.KRITHIKA	INFOSYS LTD, ROBERT BOSCH
14	12BEC053	K.S.LAVANYA	INFOSYS LTD
15	12BEC057	G.MATHIVARMA	INFOSYS LTD
16	13BEC305	A.BHUVANESWARI	INFOSYS LTD
17	12BEC018	B.DEPIKA	INFOSYS LTD
18	12BEC031	B.HARSHAVARTHINI	INFOSYS LTD
19	12BEC117	S.YOGAPRIYA	INFOSYS LTD
20	12BEC114	M.VIGNESH	INFOSYS LTD
21	12BEC093	R.SARANYA	INFOSYS LTD
22	12BEC095	C.SARAVANA RAJ	INFOSYS LTD
23	12BEC066	G.NIVILAH JERISHMA	INFOSYS LTD
24	12BEC076	A.PRIYADHARSINI	INFOSYS LTD
25	12BEC087	K.SABAREESH	INFOSYS LTD
26	12BEC081	J.RAJAGURU	INFOSYS LTD

27	12BEC089	S.SAKTHIVEL	INFOSYS LTD
28	12BEC101	K.SELVA RANI	INFOSYS LTD
29	12BEC099	N.SELVA BRINDHA	INFOSYS LTD
30	12BEC013	B.ASHWIN DEEPAK	L&T INFOTECH
31	12BEC022	M.ESWARAMOORTHY	L&T INFOTECH
32	12BEC094	P.SARAVANAPRIYAN	L&T INFOTECH
33	12BEC109	T.SURENDAR	L&T INFOTECH
34	12BEC060	S.MOHANRAJ	L&T INFOTECH
35	13BEC302	K.BOOBALAKRISHNAN	L&T INFOTECH
36	12BEC080	K.P.RAGULNAATH	L&T INFOTECH
37	12BEC073	K.K.PRAVEEN KUMAR	L&T INFOTECH
38	12BEC112	T.SWATHY	L&T INFOTECH
39	12BEC107	L.SUJITHA SINGH	L&T INFOTECH
40	12BEC006	T.ABINAYA	NTT DATA
41	12BEC054	M.LAVANYA	NTT DATA
42	12BEC110	N.SURYA KIRAN	NTT DATA
43	12BEC072	R.PRATHIBA	NTT DATA
44	12BEC103	S.SHILLA	NTT DATA
45	12BEC069	V.PAVITHRAA	NTT DATA
46	12BEC070	S.PAVITHRA	NTT DATA
47	13BEC310	K.SOUNDARANAYAKI	NTT DATA
48	12BEC084	R.REVATHI	NTT DATA
49	12BEC005	E.ABINAYA	POLARIS
50	12BEC026	M.GEERTHANA	POLARIS
51	12BEC034	V.INDHUMATHI	POLARIS
52	12BEC079	G.RAGULAN	POLARIS
53	12BEC102	S.SENTHAMILSELVAN	POLARIS
54	12BEC111	R.SUWEDHA	POLARIS
55	12BEC067	G.B.NIVVEDHA	POLARIS

56	12BEC098	C.SAVITHA	TECH MAHINDRA
57	12BEC077	S.PUNITHA GOWTHAMI	TECH MAHINDRA
58	13BEC303	T.VIGNESHWARAN	BURNING GLASS
59	12BEC059	MEENACHI.K	VVDN
60	12BEC030	S.HARIHARA KUMAR	НР
61	12BEC074	PRIYADHARSHINI.K	UST Global
62	12BEC097	SASIPRIYA.V	UST Global
63	12BEC064	NAVEEN KUMAR.S	SMARTDV TECHNOLOGIES
64	12BEC083	RENUKUMAR.D	SMARTDV TECHNOLOGIES
65	13BEC315	N.KOWSIKA	SMARTDV TECHNOLOGIES
66	13BEC317	M.GAYATHRI	SMARTDV TECHNOLOGIES
67	13BEC322	S. GANESH PANDI	APPASAMY ASSOCIATES
68	13BEC319	N.ABURAJA	GEMINI COMMUNICATIONS,E –WAVE TECHNOLOGIES
69	12BEC056	S.MANOKARAN	GEMINI COMMUNICATIONS, SERVION GLOBAL SOLUTIONS
70	12BEC092	S.SANTHOSH KUMAR	GEMINI COMMUNICATIONS
71	12BEC082	RAJESHWARI.A	SUTHERLAND GLOBAL SERVICES
72	12BEC075	L.PRIYADHARSHINI	SUTHERLAND GLOBAL SERVICES
73	12BEC039	KANCHANA PRIYA R	CARESOFT GLOBAL
74	13BEC311	BOOPATHIKANNAN K	CARESOFT GLOBAL
75	12BEC105	SOWMIYA.K	CARESOFT GLOBAL
76	12BEC091	SANTHIYA G	СТЅ
77	13BEC320	B.NANDHINI	CMS IT SERVICES
78	12BEC010	V.K.AKSHAI GRACEA	E-WAVE TECHNOLOGIES
79	12BEC014	M.R.ASWIN	E-WAVE TECHNOLOGIES, SUTHERLAND GLOBAL SERVICES
80	12BEC037	R.KAEESWARAN	E-WAVE TECHNOLOGIES
81	12BEC052	P.LAKSHMINARAYANAN	E-WAVE TECHNOLOGIES
82	12BEC008	H.AHAMED ANSARI	E-WAVE TECHNOLOGIES
83	12BEC051	A.KUMARAVEL	E-WAVE TECHNOLOGIES
84	12BEC106	P.SRINIVASAN	E-WAVE TECHNOLOGIES

## The Team

Roll no	Post	Name and Year
12BEC040	President	U. Kandhar Vishnu, Final ECE
12BEC066	Vice President	G. Nivilah Jerishma, Final ECE
13BEC052	Secretary	J. Samuel Lawrence, III ECE
13BEC072	Joint Secretary	K. Sabitha, III ECE
12BEC019	Executive Member	G. Dharani Raja, Final ECE
13BEC073	Executive Member	A. Haritha, III ECE

### **OFFICE BEARERS:**

Roll no	Name and Year	MOET Br. Makalingun Gallinge al Engineering and Inchaster Pajitali - Di (de Automasian Institution)
12BEC079	G. Ragulan, Final ECE	Electronics and Communication Engineering
13BEC317	M .Gayathri, Final ECE	Uddeshah'16
12BEC042	T. Kavitha, Final ECE	MR HOIMES
12BEC069	V. Pavithraa, Final ECE	
13BEC090	G. Srinidhi, III ECE	concerns and a financial for the first state of the
13BEC070	J. Gokulkumar, III ECE	Pate: 11.03.2016
13BEC036	V. Anitha, III ECE	2.80 pm
13BEC043	S. Nandhini, III ECE	Prix by Prix b
13BEC042	P. Kiruthika, III ECE	O traper Sec
13BEC032	V. Saveetha, III ECE	
13BEC045	K. Kalaivani, III ECE	
14BEC089	K. Manikandan, II ECE	
14BEC073	K. Sakthi, II ECE	
14BEC052	R. Pavithra, II ECE	
14BEC096	G. Ganaga Rajesh, II ECE	

### **Editorial Team:**

Roll no	Name and Year	
12BEC086 13BEC302	S. Rohitha, Final ECE K .Boopalakrishnan, Final ECE	
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13BEC088 13BEC051	M .VaibavMuthuMeenakshi, III ECE M. Kunkumaagalya, III ECE	
14BEC043	M. Ranjithkumar, II ECE	
14BEC012	D Kavin, II ECE	

# Divide the task, multiply the success.



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