ESTD : 2010

AAR MAHAVEER NEWSLETTER

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From the Principal's Desk

Have you heard of the ***S*** curve in business? Normally, the performance of an organization improves over time first slowly and then rapidly. After reaching peak, performance may again go down. Any organization that would like to avoid the decline phase has to take innovative actions well in advance (*Charles Handy: The Second Curve*). It may be a change in technology or in management strategy or employee attitude. Not only an organization, every individual performs along the S curve, with hope, expectation, change of life or direction. The second curve has to be very different from the first curve. Hence one has to constantly equip oneself to face the ever changing situation. If people teach themselves the art of "self-responsibility" — how to take care of their own education, health and finances, for instance — they will flourish. People want to be led by leaders with Humility. Voices should be listened to. Some body knows a better way than you. Institutions should be remade as citizen organizations. Some degree of democracy is essential in a business organization.

We the teachers too must ask ourselves if we are prepared to face a changed and challenging situation. We can not afford to be like the photographer who went out of business because he was reluctant to learn digital photography when it came. Whatever be the subject of the teacher, he must be a continuous learner and a flexible learner of several other subjects as needed. The teacher has to be on his toes and not miss an opportunity to equip himself better. It may be gaining experience in the Exam Branch or AICTE / JNTUH uploading or acquiring a higher qualification or in writing a research or review paper. Now even engineering graduates are eligible for B. Ed. Only those people will be successful who make the best use of time during their free hours and summer vacation. Those who link their output to rewards will not have enriching experience as the rewards are not always forthcoming.

Creativity is not the possession of a select few but a natural and accessible part of every human life regardless of circumstance. Things can be improved by iteration. The first draft made by a novelist is unlikely to be appealing to the reader. The author refines it every day and finally arrives at a master piece. We should learn to survive failure, financially, psychologically, physically, emotionally. The Wright Brothers were neither the first nor only ones to envision and pursue man-made flight, but they ultimately achieved it – not in a single flash of insight – but through countless failures, re-steps and sheer iterative hard work. You are most motivated when you do some thing on your own initiative than being forced by some one else. (*Kevin Ashton: How to fly a horse*).

– Dr. Balakrishna Palanki

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In this issue .....

We now have a new principal, Dr. C. K. Rani. We ring wedding bells for Sivaprasad. Previous principal received the highest grading in participant feedback at NTPC programme. Academic & Model Exhibition Prize winners and sponsors are listed. Swach Bharat at Mahaveer follows. Babies and dolls look alike, says Shilaja. Then students speak out. We celebrate faculty achievement in Technical Quiz and the arrival of Appalakonda's baby. We bid farewell to those leaving. Let us not forget the underprivileged, says Roopa. We respect our tradition. It is *Duty First* in Exam Branch. A seminar was attended on Cultural Nationalism. The life of Shirley is inspiring to all. The last, but not the least is ***From Far and Near***.

Dr. (Mrs). **C.K.Rani** has taken over as Principal of AAR Mahaveer Engineering College. She obtained her M.Sc. and Ph.D from Andhra University. She has 29 years of experience in teaching and industry. She worked in the field of engineering geophysics as Chief Research Officer at Central Water and Power Research Station(CWPRS), Pune under MOWR, Govt. of India. She worked on various projects in India and abroad for solving varied problems pertaining to water resources and submitted about 25 technical reports. She has 12 research papers to her credit and presented research papers in various national and international seminars / Conferences. She was a former member of Sub-Committee on Geological Investigations and subsurface exploration, Bureau of Indian Standards .

Wedding Bells

Siva Sai Gayatri, B.Tech., married Sivaprasad, M.Tech (IIT Kharagpur), Asst. Professor in Hyderabad on 10.5.2015

Sri Surender Reddy, Secretary, Mahaveer Educational Society graced the occasion by his presence to bless the couple

From left: Nagaraju Naik, P. Nookaraju, Sri Surender Reddy, Sivaprasad, Siva Sai Gayatri Prof. Malla Reddy, Prof. Sashidhar

"I love you not for who you are, but who I am when I am by your side".

"Never stop smiling, not even when you are sad, some one might fall in love with your smile".

"You may only be a person in this world, but for some one, you are the world".

- Gabriel Garcia Marquez (1927-2014)

Professor Balakrishna Palanki conducted a two day Refresher Course for a batch of 15 serving engineers at Ramagundam Super Thermal Power Station, National Thermal Power Corporation, on June 12 & 13, 2015.
In the written feed back forms, all the participants gave him the highest rating.

Overall Academic Toppers 2014 and prize sponsors			
	Prize	Winner	Prize Sponsored by
Diploma	I	Katakam Srinivas 11233EE024	Dr. C. K. Rani Then HOD (H&S)
	II	Kantipudi Ashok 11233EE022	
B. Tech MIST	I	A. Srikanth EEE 10E31A0203	Dr. R. V. Amar nath HOD(EEE)
	II	K. Aditya Valli EEE 10E3A0233	
	III	G. Swetha Rani EEE 10E31A0222	
B. Tech AARM	I	Hashmath Sultana 108P1A0419 ECE	Principal, MIST
	II	Fehmida Bano 108P1A0415 ECE	
Winners in Model Exhibition 2015			
B. Tech MIST	I	K. Shreya 11E31A0328, A. Sajjith Reddy 11E31A0305, R. Sindhura 11E31A0348, Anil Yadav 11E31A0304(Mech)	Dr. K.S.S.S.N. Reddy, Principal MIST
	II	Imthiyaz Hussain 14E35A0103, B. Eshwar Rao 14E35A0101 (Civil)	
	III	P. Krishna Kumar 11E31A2125, M A Maqueet Fahad 11E31A2119, Illyas Ahmed 11E31A2112, A Ram Babu 11E31A2104 (Aero)	

Swach Bharat at Mahaveer 11.04.2015

It is our vow to keep India clean

Getting started early in the morning

The dignity of labour demonstrated by A.S. Latha, Asst. Professor and T. Rama Latha, Librarian

Under inspiration from Swami Vivekananda

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- ***Baby and Doll***, Inserted by S. Shilaja, Asst. Profesor (ECE)

Three students of III ECE, C. Mounica (left), Anu P. Suresh (Centre) and Jyothirmaie (right) met the principal on 23.05.2015 and shared their thoughts with him. Here is a brief account of what they are concerned about today and what they wish to become:

C Mounica

(Father is an income tax consultant. Mother is lecturer in Economics).

The RTC strike came at a wrong time and was too long causing extensive suffering to the student community. It was hot summer and peak examination time and students suffered a lot. Auto rickshaws and private buses took advantage of the situation and charged heavily. I wish to appear for the Combined Graduate Level Examination of the Staff Selection Commission. One has to get through Tier 1, Tier 2 exams and then the interview.

Anu P. Suresh

(Father manufactures and supplies parts of lathe machines to a machine manufacturer. Mother is a housewife). I am deeply concerned about Nepal earth quake. The loss of life is mostly due to unscientific construction work. Many foreigners were stranded and airlines made money by charging heavily, may be three times the normal price. The law of the land is not fair for poor people. I will donate 1% of my earnings to the poor. There are several poor under trials in prison for lengths of time far exceeding that prescribed for the offence. On the other hand, rich, influential and high profile persons are able to get bail or even exonerated by courts easily. I would like to get some industrial experience immediately after my B.Tech. Experience in industry is more valuable than higher qualification in the present circumstances. I very much want to get into a job quickly and add to the income of my parents. Afterwards I will decide future course of action.

K. Jyothirmaie

(Father is a Manager in Namdhari Tents. Mother is a housewife). The BBC documentary ***India's daughter*** should not have been banned. People have the right to know the truth. Naturally we are disturbed by the increasing influence of fundamentalism and acts of terrorism throughout the world. I am happy that due to Swach Bharat campaign with the Prime Minister himself in the lead, several regions of the country wear a clean look. The power situation in Hyderabad has improved, from previous scheduled four hour cuts per day to the present unscheduled cuts of a few minutes. The future belongs to highly qualified people. I would like to go for higher studies in India either in Engineering or Management.

"Do not cry because it came to an end. Smile because it happened"

- Gabriel Garcia Marquez (1927-2014)

The Technical Quiz Team headed by P. Varaprakash, Asssociate Professor broke previous record in securing student participation. A 'Thank you' meeting was held on 13.03.2015. Topmost: Team members with Principal AARM, Principal MIST and Convenor Technomist2K15. Centre: P. Varaprakash. Bottom: woman power in the team

Hearty Congratulations

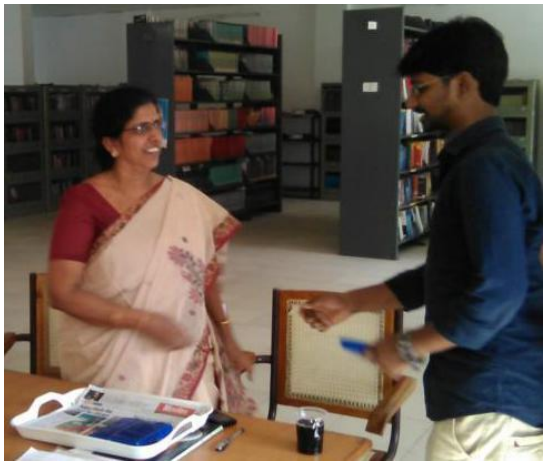
Smt. Ratnakumari and V. Appalakonda, Asst. Professor CSE have been blessed with a baby girl

V. Bindu Sree

on 01.05.2015

Farewell to our dear faculty members 30.04.2015

T. Naresh, Asst. Professor EEE



K. Kumara Swamy, Asst. Professor ME

G. Ramesh, Asst. Professor ECE

K. Veeranjaneyulu, Asst. Professor BSH

Time to speak out

Mixed feelings among colleagues

Ms. Shirisha, Asst. Professor ECE responds

Dr. Balakrishna and Dr. C. K. Rani Outgoing and Incoming Principals

Let us not forget the under-privileged

A picture is worth a thousand words

At least, let us not bargain if not giving more ...

- Inserted by G. Roopa, Lab Assistant (ECE & Exam Branch)

"If I can put one touch of rosy sunset into the life of any man or woman, I shall feel that I have worked with God" – Gilbert Keith Chesterton (1874-1936)

"A loving person lives in a loving world. A hostile person lives in a hostile world. Every one you meet is your mirror" – Ken Keyse (1921-1995)

"You don't lead by pointing and telling people to go to some place to go. You lead by going to that place and making a case" – Key Keyse (1921-1995)

"A good man fights for himself. A great man fights for every one else"
- Philip De Franco b.1985

"It always seems impossible until it is done" - Nelson Mandela (1918 – 2013)

Traditional Day Celebrations

Students Colourful

as well as Cheerful

Faculty (and staff) Fantastic

Generations change, tradition does not

Ayyo, not ready, please do not click

Now we are ready

Duty first, in Examination Branch!

For Sravanti, who arrives first and leaves last every day, Work is Worship

G. Roopa, B.Tech (ECE) checking and rechecking in Exam Branch

Vedavyas Gurla, HOD (CSE) and Exam Branch Incharge receives a bouquet as a token of appreciation

Cultural Nationalism, Hyderabad, 31.05. 2015

Luminaries from left: D R S P Raju (Chairman, Vayhan Coffee Ltd.), Dr. K I Varaprasad Reddy, (CMD, Shantha Biotechnics), Padma Vibhushan Prof. P Rama Rao, Chairman, Advanced Research Centre for Powder Metallurgy International, Sri Dattatreya Hosabale, Joint General Secretary, RSS, Kala Tapasvi & Padmasri Dr. K Viswanath

Sri Surender Reddy, Secretary, Dr. P. Balakrishna, Principal AARM, Dr. K Chakraverti, Director R&D, Dr. B. Visvesvara Rao, HOD ECE, Prof. Gunasekhar Reddy, IPS (Retd) ECE and Dr. V. Kamaraju, EEE attended the meeting as invitees.

Dame Stephanie (Steve) Shirley

Stephanie Shirley (b.1933) is a British businesswoman and philanthropist. She originally arrived in Britain as an unaccompanied Jewish child refugee. After schooling in the 1950s, she worked at the Post Office Research Station building computers from scratch and writing code. She studied at evening classes for six years to obtain a Mathematics degree. In 1959 she moved to CDL Ltd, manufacturers of the ICT 1301 computer. In 1962, Shirley founded the software company F.I. Group. She adopted the name "Steve" to help her in the male dominated business world. She was concerned with creating work opportunities for women with dependents, and predominantly employed women until the Sex Discrimination Act 1975 made that practice illegal. Her projects included programming Concorde's black box flight recorder. She received several Honours including the Order of the British Empire (OBE) and Fellow of the Royal Academy of Engineering. She has donated most of her wealth to charity.

Great Loss

K. Chaitanya, Asst. Professor (Mechanical Engg.) lost his beloved mother **Indira** on 21.05.2015. The Management of Mahaveer Educational Society and staff convey their heart felt Condolences

From Far and Near

Perovskite solar cells

2015 is the International Year of Light. Solar cells are most commonly made of Silicon which convert 15 to 20% of sunlight received into electricity. Cadmium Telluride solar cells are also in use with efficiency of 21.5%. Now perovskites offer the possibility of higher efficiencies, judging from the increase in conversion efficiency from 5% to 20% in just four years. The most commonly studied perovskite absorber is methyl ammonium lead trihalide, with an optical band gap between 2.3 eV and 1.6 eV depending on halide content. Silicon requires processing at 4000 C for 18 hours. On the other hand, perovskites can be synthesized at about 100 C. The payback period for Silicon solar cells is 2 to 3 years, while it is one or two months for perovskite solar cells. Si solar cells absorb visible as well as infrared rays and generate 0.75 V while perovskites absorb only visible light and generate 1.15 or 1.2. V. Researchers are attempting to combine both types of materials, the upper perovskite layer absorbing visible light and the lower silicon layer absorbing infra red light to enhance efficiency. The problems that are yet to overcome are the degradable nature of perovskites and non availability of cheap long lasting batteries. Solar electricity is being used for electrolysing water to get hydrogen, a clean fuel or alternatively in making synthetic fuel.

Protect the bees or perish!

Almost 80% of crop pollination by wild bees is provided by just 2% of the most common species. Bee populations are threatened by nicotinides used in pesticides. But protecting a wide range of bees would "provide an insurance policy against future ecological shocks, such as climate change", the scientists at the University of Reading say. "The few bee species that currently pollinate our crops are unlikely to be the same types we will need in the future. It is critical to protect a wide range of bees and other insects now so that, as climate, environment and crop varieties change, we can call on the pollinating species which are best suited to the task. We need a large and diverse group of species on the substitutes' bench, ready to join the game as soon as they are needed, if we are to ensure food production remains stable."

Rule of Law Index

The US based World Justice Project analysed 102 countries worldwide using a survey of over a thousand respondents from three big cities. The data measures how the rule of law is experienced in practical everyday situations using 47 indicators across 8 categories - constraints on government powers, absence of corruption, open government, fundamental rights, order and security, regulatory enforcement, civil justices and criminal justice. India ranks 59. Denmark, Norway and Sweden occupy the first three positions. UK ranks 12 and USA 19. China is at 71 and Russia 75. Pakistan is at 98 and Bangladesh 93.

Windows 10

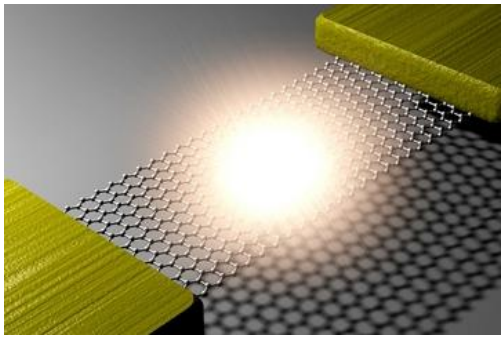
The graphical user interface operating system evolved through Windows 1.0, 2.0, 3.0, NT 3.0, 95, NT 4.0, 98, XP, Vista, Windows 7 and 8. Now comes Windows 10, skipping Windows 9. It will be the last version of the dominant desktop software. Instead of new stand-alone versions, Windows 10 would be improved in regular instalments, reflecting a change. 'No Windows 11'. "In the past, the developers would be locked away and out would pop a product based on what the world wanted three years ago." Microsoft also had to convince people that they needed this new version. Moving to a situation in which Windows is a constantly updated service will break out of this cycle, and let Microsoft tinker more with the software to test new features and see how customers like them.

For work, age is no bar!

Florence Rigney, the oldest working registered nurse, has celebrated her 90th birth day while still on the job at a US hospital. Ms. Rigney started working at Tacoma General Hospital in Washington state in 1946. It was her lifelong dream since she was a girl.

Electricity from waste

Vivekananda Kendra, Kanyakumari has built a solid waste management shed at Mamallapuram for collecting and processing entire waste for feeding into a bio-gas plant which in turn provides electricity for road side lamps. The biogas plant (of 100 cubic metre volume) is a floating drum like device attached to engines that generate electricity. It has been functioning well since four years.



Thinnest filament

Incandescent bulbs use tungsten as filament by virtue of its high melting point, 3422 C. Now bulbs have been made using graphene (an atomically thin and perfectly crystalline form of carbon, melting point 3550 C) as filament material. Graphene, famous for being stronger than steel and more conductive than copper, can add another wonder to the list: making light. Of course, the incandescent bulb itself is being phased out as energy saving CFLs and long lasting LED lights are becoming popular. Meanwhile, researchers at IIT Madras have made graphene nano ribbons by grinding together different types of carbon nano tubes without using any chemicals.

A billion pictures per second!

The speed of light is almost 300 million meters per second. At that speed, it would take just one second to travel around the world seven-and-a-half times. For the first time, we can see light pulses traveling in space at the speed of light. Researchers at Washington State University photographed light particles moving at that speed using a unique camera. It converts light particles, or photons, into electrons, then pulls the electrons, really hard, at different rates, depending on the time of arrival. So the time of arrival will be converted into different vertical positions. It produces two-dimensional images like regular photographs, but at a speed of one image every 10 trillionths of a second.

Visit www.aarm.ac.in or www.scribd.com for other issues of the newsletter

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Mahaveer Educational Society

Chairman: Sri. S. Sudershan Reddy garu, Secretary: Sri. S Surender Reddy garu.

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