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From the Principal's Desk

What was unthinkable in the past is a reality today. With this awareness, we must all be open minded to a new idea, however ridiculous it may first appear to be. A farmer in Nasik district cultivated straw berries for the first time in India and became well to do. A school teacher in China started the online marketing alibaba.com and became a billionaire. So when a student or a faculty member comes up with a new idea, why not give a try?

Ours is a civilization that is overwhelmed by rapid technological changes. Only those institutions will survive who are quick to adapt to changes. This is possible only with a conscious work force. According to a Gallup survey, only about 30% of employees (27% of males and 33% of females) are 'engaged' in their work, or involved in and enthusiastic about their work and contributing to their organizations in a positive manner. In other words, 70% of workers are emotionally disconnected from their workplaces and are less likely to be productive. Those who have been entrusted with supervisory responsibility must lay down formats for action and install a monitoring mechanism to identify and support the precious 30%. As the Management Guru Gary Hamel said, there can be no distinctive performance without distinctive skills. One need not feel that one is doing too much for the institution or the society, as whatever is done is done during college hours and during one's finite life time.

Admiral Hyman Rickover framed seven rules. I will mention three here. *Rule: You must have a rising standard of quality over time, and well beyond what is required by any minimum standard.* We must be constantly looking for a better way to do things. Status Quo is no longer acceptable. There are better ways to train our students. There are better ways to supervise. There are better ways to discipline errant persons. We must improve our performance in response times, quality and timeliness of action. *Rule: Training must be constant and rigorous.* Every day must be a training day! We must assure that all personnel are adequately trained to address the tasks that give them no time to think, and that they understand the value of thinking things through when time allows. *Rule: The organization and members thereof must have the ability and willingness to learn from mistakes of the past.* Analysis of past data is the foundation for almost all of risk management. We can learn so much by studying the mistakes we have made in the past.

– Dr. Palanki Balakrishna

In this issue

We present several photographs of TECHNOMIST 2K15, a national level student technical seminar and Annual Day celebrations. As usual, interesting developments are presented in the series *From Far and Near*. India born man is the President elect of the Royal Society. Stanford University has unveiled a new economical high capacity fast charging battery. As obesity is on the rise, tips on how to stay lean follow. Betel leaf quids are not harmless as we thought. The Indian Railways are determined to punish polluters. We can make cooking gas from one kind of waste and generate wealth from another kind of waste. Finally, for sustenance, we must all switch from a linear economy to a circular economy.

TECHNOMIST 2K15, a National Level Student Technical Seminar (3.3.15) and Annual Day (4.3.15) Celebrations



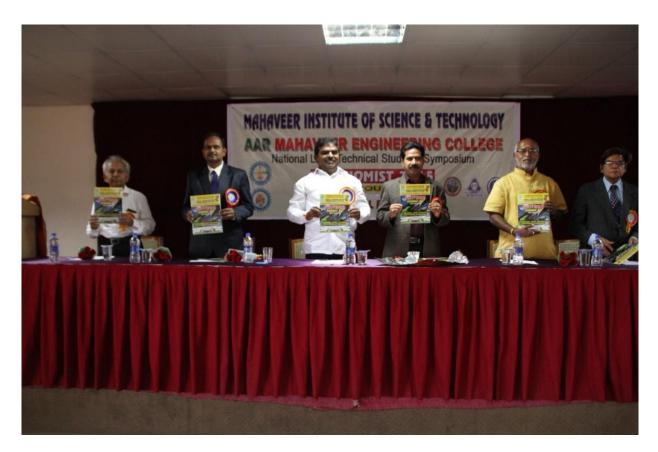
Prayer by (From the left): B. Ramesh, R. Akshay, B. Ravali and P. Gayatri



Chief Guest, Dr. Balu Naik, Director, UGC-Academic Staff College JNTUH delivering his message to our youth



Sri. S. Sudershan Reddy, Chairman, Mahaveer Educational Society addressing the students



Releasing Souvenir of TECHNOMIST 2K15. From left: Convenor, Principal MIST, Secretary MES, Chief Guest, Chairman MES, Principal AARM



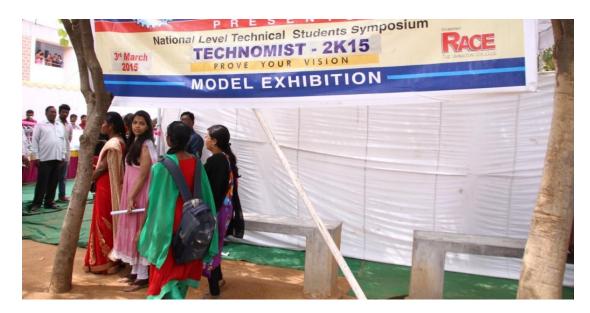
Dr. Balu Naik, Director, UGC Academic Staff College, JNTUH being felicitated by Chairman



With reverence - the National Anthem



Inauguration of Model Exhibition and Stalls by Dr. Balu Naik, Chief Guest and Director UGC Academic Staff College, JNTUH



Anticipation while entering the Model Exhibition



With us, it is not so easy for you to win!



A rare chance to enjoy our preparations



Arrival of Chief Guest, Dr. A. Govardhan, Director, School of Information Technology, JNTUH



Arrival of Smt. Anjamma, Mother of Chairman and Secretary to bless the students and staff



The Annual Day function begins with a prayer



Vandemaataram binds us all



Dr. K.S.S.S.N. Reddy, Principal MIST receives a bouquet



Dr. Palanki Balakrishna, Principal AARM receives bouquet



Dr. B. Visvesvara Rao (HOD) ECE & Convener TECHNOMIST 2K15 receives bouquet



Sri. S. Surender Reddy, Secretary MES stresses on the imperatives for a strong India



Dr. Govardhan, Director, School of Information Technonology, JNTUH and Chief Guest receiving memento



Sri. Akshat Reddy, Cricketer and Guest of Honour receiving memento



Smt. Manju Varma, anchor eminent



Smt. Rajeshwari, anchor eloquent



Effort magnificent, behind the scenes



Cheerful and ready to serve



An event spirited throughout



A quick meal before the award function

Prize winners, the Pride of AAR Mahaveer Engineering College





P. Akhila (left) and Sunkari Sushmitha (Right) receiving certificates from Dr. Govardhan



A. Sreeja (left) receives cup from Sri. Dhanunjay Reddy and Bapur Esther (Right) from Sri. Akshat Reddy

Felicitation of Co-conveners, TECHNOMIST 2K15 by Principals MIST & AARM



Determined people working together can do any thing - James E Casey (1888-1983)

Intellectual growth should commence at birth and cease only at death - Albert Einstein (1879-1955)

That is a good book that is opened with expectation, and closed with delight and profit - Amos Bronson Alcott (1799-1888)

People are just as happy as they make up their minds to be - Abraham Lincoln (1809-65)

Treat the other man's faith gently as it is all he has to believe with - Athenus

The untrodden path is choked by weeds of tradition. Be not afraid to cut through - Hyman G Rickover (1900-86)

"When they suffer they ask, 'Why me?' When they prosper, they never ask, 'Why me?' " - Ramakrishna Paramahamsa (1836 - 1886)

The highest reward for a man's toil is not what he gets for it but what he becomes by it" - Theodore Ruskin (1915 - 2004)

Annual Day Cultural Programme on 4.3.2015



Elegance personified – P. Mounika



Moving with the times – (from the left): K. Shwetha, K. Swapna, V. Vaishnavi



Some thing wonderful going on, on the stage!



Sri and Smt. Dhanunjay Reddy electrifying the atmosphere

From Far and Near

Venkataraman is the President

Structural Biologist and Nobel Laureate Sir Venkatraman Ramakrishnan has been confirmed as President Elect of the Royal Society. He shared the 2009 Nobel Prize in Chemistry for discovering the precise structure of ribosomes, the molecular machines that manufacture proteins inside living cells.

Digital India in the offing

The government's ambitious Digital India project aims to connect all gram panchayats by broadband Internet, promote e-governance and transform India into a connected knowledge economy.

New electric battery

Researchers at Stanford University have developed a high performance aluminium battery that is fast recharging (minutes instead of hours), long lasting (more than 7500 charge – discharge cycles instead of 1000) and inexpensive. It offers a safe alternative to many commercial batteries in wide use today, such as alkaline (not environmental friendly) and lithium ion (not fireproof) batteries. The new battery consists of aluminium anode and a graphite cathode. The electrolyte is a salt that is liquid at room temperature and is contained in a polymer coated pouch. It generates 2.0 V instead of the usual 1.5 V.

Lean and not hungry

(a) British scientists have developed an ingredient that suppresses appetite, keeps you feeling full longer and prevents weight gain. The new supplement, inulin propionate ester (IPE), contains propionate, a compound that is naturally produced when fibre in the diet is fermented by microbes in the gut. Propionate stimulates the gut to release hormones that act on the brain to suppress hunger. IPE provides much larger amounts of propionate than people can generate from a regular diet. Those who had IPE ate 14 percent less and had higher levels of appetite-reducing hormones in their blood. (b) A new device to treat obesity controls feelings of hunger and fullness by targeting the nerve pathway between the brain and the stomach. It consists of a rechargeable electrical pulse generator, wire leads and electrodes that are surgically implanted into the abdomen. It works by sending electrical pulses to the trunks in the abdominal vagus nerve, which regulates stomach emptying and signals the brain that the stomach feels empty or full. Once implanted, the patient can recharge the device and the settings can be adjusted.

Quid deadly



Shreds of arrack nut, slaked lime, cinnamon, cardomom, tobacco and other things are wrapped up in a betel leaf into quid. The incidence of oral cancer has been found to correlate well with the frequency of pan chewing. The slaked lime causes hundreds of tiny abrasions to form in the mouth, thereby making available several entry points to the chemicals that cause cancer.

Fine hefty

Under the *Polluter Pays* principle, the National Green Tribunal empowered the Railways to impose a fine of Rs. 5000 on anyone found littering or defecating on tracks or platforms. Those residing along the tracks and disposing waste on railway property would also be fined.

Gas from Waste

A plant producing Compressed Natural Gas (CNG) from waste was set up and operated by Ananda, who has studied up to Plus Two. 10 t of hotel waste, 25 t of dung and 5 to 7 t of poultry waste come in. Upon arrival, the dry waste is first crushed. After removing non-organic (such as plastics or silica) the waste is sent to a collector

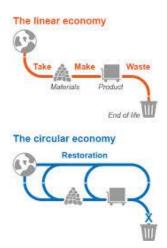
tank where slurry is prepared. It is then pumped into large sized digester chambers. Anaerobic digestion takes 21 days for production of methane at the start of the process. Daily feeding of waste ensures continuous generation. The sediments are separated mechanically and left to dry in pits for the purpose of manure. The methane then undergoes a purification process and carbon dioxide, sulphur dioxide and vapour are removed. Through a compressor, CNG is filled into cylinders for supply to the restaurants. The company also runs its supply trucks on the same CNG. The plant has been supplying 600 kg. of CNG to the Bengaluru's restaurants every day and is set to expand.

Wealth from Waste



Tetrapak cartons are used as containers for liquids such as fruit juices and milk. The used cartons are the raw material for making school benches and other plywood like products. It takes 6900 tetrapaks to make one bench. Deluxe Recycling and Khatema Fibres have partnered with Tetrapak. Together they recycle 5000 tons per anum of tetrapaks

Circular Economy



So far we practiced a linear economy, involving the steps of mining, manufacture, utilization, scrapping and land fill (also called the *Throw Away Economy*). Computers and mobile phones, for example, get outdated rapidly and are discarded. The scrap usually reaches developing countries that do not have the technology for recycling and child labour is involved. In order to increase sales, the manufacturers made goods that did not last long. Now more and more people have purchasing power. The demand for finite resources is shooting up and the linear economy of *use and throw* is no longer sustainable. In a circular economy, manufacturers will lease their products instead of selling them. All products such as cars will be used by customers and sent back to the manufacturer who will retrofit for reuse. Only the components that have failed are replaced instead of the whole assembly. To minimize costs, now the manufacturers focus on durability.

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Mahaveer Educational Society

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

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