



AARW NEWSLETTER

A quarterly publication of Anjamma Agi Reddy Engineering College for Women, Hyderabad

Issue No.9, January 2013

From the Principal's Desk

Happy new year! South Korea now has its first female President. Rita Levi-Montalcini, an Italian biologist who conducted underground research in defiance of Fascist persecution and went on to win a Nobel Prize for helping unlock the mysteries of the cell, died in December at the age of 103. Though there have always been great women, the plight of the average woman continues. According to the World Development Report 2012, globally women in salaried jobs still earn, on average, only 71% of what men do for the same kind of work. Casual workers are even worse off, averaging only 56% of the income of their male counterparts. Violence against women continues. The women's Bill continues to be pending. Greetings to all students and staff on the occasion of New Year! I want all my students and staff to extend support to less fortunate women they encounter in their life and career.

The market is flooded with Chinese made Mosquito swatter bats. Though low priced, no one can predict how long they would last. There are several complaints on the net that these fail after one or two weeks or even days. Our students have taken up repair as a Mini project and successfully completed. The new circuitry did not fit in the small space provided in the bat handle, but it worked very well, highlighting the engineering talent of our students. Richard Felder, the great educationist from North Carolina State University said, "People learn best by doing things and reflecting on what they have done, not by watching and listening to someone else telling them what to do. While a good lecture has the power to instruct and even motivate students, if lecturing is the only thing that happens in a class, the chances are that much less learning is happening than would happen if other more active methods were mixed in."

In this issue, we list toppers in examinations. There are photographs of the Pride of AARW. Hashmath Sultana tells us how to write a resume. Chief Executive Officer of Neo Silica, who was in our campus recently, offers tips for success. Then there are photographs of New Year celebrations. Mrs. Deepa wants to reflect and act. Then we present the Countess of Lovelace, the Computer Scientist of a previous era. News of developments in Science, Technology and Health follow in the regular feature *From far and near*.

- Dr. Palanki Balakrishna

"It is not by getting out of the world that we become enlightened, but by getting into the world ... by getting so tuned in that we can ride the waves of our existence and never get tossed because we become the waves." – Ken Kesey (1935-2001)

Toppers in III B.Tech I Semester II Mid Examinations (October/November 2012)

ECE: I Fehmida Bano, II Hashmath Sultana III N Priyanka

CSE: I Minu Mohan, II G Swetha Reddy, III Ch. Mounika

EEE: I B Soundarya, II Sravya Kulkarni, III N Jamuna

Toppers in II B.Tech I Semester II Mid Examinations (October/November 2012)

ECE: I P Prasanna Kumari, II Syeda Fatima Zohra, III B Saritha

CSE: I Preethi Lal, II G Shaila Rani, III B Esther, III Ch. Priyanka

EEE: I P Akhila, II S Sushmitha, III K Rohini, III M Nagamani

Toppers in I B.Tech I Mid Examinations (December 2012)

ECE: I G Pallavi, II V Pavani, III C H Mounica

CSE: I Ameena Kauser, II Vasa Preethi, III Manapati Ravalika

EEE: I K Bhavani Priyanka, II G Shailaja

Pride of AARW



Ankita Arora in action at the 11th Conference of Parties on biodiversity (1st to 19th October, 2012)

Fruits of labour – Certificate awarded to Ankita Arora, III B.Tech CSE



Guest Lecture

A guest lecture was delivered by Mr. Mallu Venkat Reddy, Scientist, Defence Research and Development Laboratory on 8.10.2012 on the intricacies of Probability Theory. Left: Guest receiving memento from principal, AARW.

How to write a resume

You qualify for campus placement if you have secured 65% with no backlogs, but nowadays this just is not enough to land in a good job. The first step is writing an attractive resume.

If you are emailing your resume as attachment, do not forget to mention the essentials in the main mail. The words in the main body of the email should enthruse the prospective employer to go one step further and open the attachment. Remember, the employer gets hundreds of email applications every day and he may simply trash your mail without reading. How do you make him read your email? Firstly, indicate in the subject field the post and the department or your branch of engineering. Secondly, keep the attachment brief – one or maximum two pages. Put upfront the items you want people to pay attention to- like your experience or awards. Do not hide them somewhere on p.17 after listing less important things.

If the employer has placed an application form on his website, fill all columns in that format, instead of emailing your standard resume. Show in bold letters the highlights of your resume. For example, highlight “fist class with distinction” instead of your residence address. An objective should be something you can relate to and talk of. Often people put very fancy objectives but aren't able to articulate anything about them. Do not copy-paste material from the internet to indicate your vision and mission statements – the employer simply skips reading such things. It is easy to figure out what is your own and what is from the net. Do not omit factual information. For example, it is not enough to write Jawaharlal Technological University. You must also write the name of the college (affiliated to the University) where you studied. The employer should not get a feeling that you are hiding some thing. When you are submitting a hard copy, substantiate all your claims. For example, attach copy of your degree certificate. If you had undergone training in a reputed industry, attach proof of the same. If you claim to have won prizes, attach proof.

Resume format

- Name
- Educational Qualifications: Degree obtained, college name, university name, year of passing, percent marks
- Experience: period (from date and to date), employer name, place
- Special achievements / capabilities / interests
- Names, designation, institution, email ids, phone numbers of persons who know your work and who can be contacted for information

Tips

- Target your CV depending on where you are applying to.
- A resume needs to be concise. There are often times when people want to put in a 1000 things they'd have done, but they are "boring" the recruiter. Limit to one or two pages only.
- Keep sentences simple and short.
- Use bullets.
- Do not use pronouns
- Do not use slang or SMS language.
- Use power words (Implemented, Assure)
- Use letter size 11 or 12.
- Do not use designs and templates
- Do not overfill

- No lies
- Use numbers and data.
- Talk about your achievements and not just responsibilities

In the interview

- Appear professional. Dress appropriately as required for the job, nature of the institution and keeping in view the generation gap between you and the interviewer.
- Switch off your mobile phone before entering the interview room.
- Wish the committee members in a good manner
- Take seat only after their asking you to sit.
- While seated in a chair, lean forward towards interviewer to give an impression of interest.

Indira Gandhi had said “There is no substitute for hard work”. She also said, “Work more and talk less”. These are proven norms for success. But, working **smart** pays richer dividends than working just **hard!**

- Hashmat Sultana, III B.Tech ECE

For success in career and in life

- Your attitude towards learning and towards life and society determine what you will be. If you want to excel and work for it, no one and nothing can stop you from reaching your goal.
- Do not be afraid to shoulder responsibility. View every problem as a challenge. Face the challenge head on.
- Fix time deadlines for every task. Make a time table and implement it religiously. Do not give up easily. Successful people are those who persisted in their effort in spite of set backs.
- Manage your time efficiently; make use of every minute, since time lost once is lost for ever!
- Study well, master your subjects, and become a professional.
- Learning does not stop with B.Tech. You have to learn continuously and keep learning for ever. When the opportunity knocks, you should not be found lacking.
- Expand your vocabulary and refine your expression. Make use of appropriate body language. Ability to communicate is essential.
- Network liberally with people. No single individual alone can achieve much.
- After gaining some work experience, be bold and start your own enterprise and generate jobs. In the recent past, employment in the US was provided by small entrepreneurs and not by mammoth companies like automobile manufacturers.

- B. Satyam, Chief Executive Officer, NeoSilica
(In his speech delivered in our campus on 22.12.2012)

“When you dig a well, there's no sign of water until you reach it, only rocks and dirt to move out of the way. And when you have removed enough; soon the pure water will flow” - Gautama Buddha (563 BC-483 BC)



Anchors extraordinary - Jyothsna, Pratyusha and Swetha Reddy (III B.Tech CSE) kick-starting New year Celebrations 2013



Every one has a New Year wish to tell



Eagerly waiting for the thing to happen
From left: M. Ravalika, Syeda Fatima Zohra, K Vineela, B Maha Laxmi, G Pallavi, Srija



New Year Game - Trying to figure out what their friends like
From left: Ala Akhila, Bhavani Priyanka, B Esther, Soundarya, P Prasanna, C H Mounika



Revathi (I B.Tech ECE) renders an inspiring and thought provoking song



Shivani (III B.Tech ECE) presents a popular song on audience demand



Ms. Vasudha, Asst. Prof ECE, swings into action for the New Year



**Sri Surender Reddy, Secretary, Mahaveer Educational Society
graced the occasion by his presence**

To reflect and Act

The difference between the poor countries and the rich ones is not the age of the country. This can be shown by countries like India and Egypt that are more than 2000 years old and are poor.

On the other hand, Canada, Australia and New Zealand, that 150 years ago were inexpressive today are developed countries and are rich.

The difference between poor and rich countries does not reside in the available natural resources.

Japan has a limited territory, 80% mountainous, inadequate for agriculture and cattle raising, but it is the second largest world economy. The country is like an immense floating factory, importing raw material from the whole world and exporting manufactured products.

Another example is Switzerland, which does not plant cocoa but has the best chocolate of the world. In its little territory they raise animals and plant the soil during four months per year. Not enough, they produce dairy products of the best quality. It is a small country that transmits an image of security, order and labour which made it the world's strong safe.

Executives from rich countries who communicate with their counterparts in poor countries show that there is no significant intellectual difference.

Race or skin colour are also not important: immigrants labeled lazy in their country of origin are the productive power in rich countries.

What is the difference then?

The difference is the attitude of the people, framed along the years by the education and culture.

On analyzing the behaviour of the people in rich and developed countries, we find that the great majority follow the following principles in their lives.

1. Ethics, as a basic principle.
2. Integrity
3. Responsibility
4. Respect to the laws and rules
5. Respect to the rights of other citizens
6. Work loving
7. Strive for saving and investment
8. Will of super action
9. Punctuality

In poor countries, only a minority follow these basic principles in their daily life. We are not poor because we lack natural resources or because nature was cruel to us. We are poor because we lack attitude. We lack the will to comply with and teach these functional principles of rich and developed countries.

- collected by T. Deepa, Programmer

“Nobody makes anybody enlightened. Just tell them what you want to say, then let them decide for themselves” – Toba Beta



Wedding Bells: Kavya married Dhananjay Reddy, son of Chairman on 27.10.2012

Augusta Ada King, Countess of Lovelace

(10 Dec 1815 – 27 Nov 1852), was the daughter of the English poet Lord Byron. Her mother was expecting a baby boy and was disappointed when Ada was born. She did not care to bring up her daughter. With divorced father having shown no interest either, Ada grew up at her grand mother's place. She was a mathematician and writer chiefly known for her work on Charles Babbage's early mechanical general-purpose computer, the analytical engine. She translated an article by Italian mathematician Luigi Menabrea on the engine, which she supplemented with a set of notes of her own.



These notes contain what is considered the first computer program – that is, an algorithm encoded for processing by a machine. Ada's notes are important in the early history of computers. She also foresaw the capability of computers to go beyond mere calculating or number-crunching. She died of uterine cancer at the age of 36. The computer language Ada was named after Ada Lovelace. The Department of Defense Military Standard for the language, "MIL-STD-1815", was given the number of the year of her birth. Since 1998, the British Computer Society has awarded a medal in her name and in 2008 initiated an annual competition for women students of computer science.

From Far and Near

Non stick surfaces through nanotechnology

You are familiar with nonstick cookware, which use a coating of polytetrafluoroethylene (Teflon), a material with a very low coefficient of friction. Now a new substance, ***LiquiGlide*** has been used for making super hydrophobic surfaces that repel water droplets, like the lotus leaves in a pond. It has been named one of the “Best Inventions of the Year 2012” by *Time* magazine. Prof. Kripa Varanasi’s group at Nano-engineered Surfaces, Interfaces & Coatings Lab, Massachusetts Institute of Technology has developed the super-slippery, non-toxic coating for the insides of food containers, so these surfaces will concede the stored condiment down to the last drop. No scraping, rinsing or special manoeuvres required. “And the compound is safe enough to eat,” says Varanasi. Industrial applications include hydrophobic coating on air craft wings to keep off ice and clog-free piping in the oil and gas industry.

Hypochondria

It is the obsession that one has (or likely to develop) a serious or life threatening disease that has not been diagnosed yet. This causes significant anxiety that goes on for months or longer, even though there is no clear medical evidence that one has a serious health problem. While having some anxiety about health is normal, full-blown hypochondria is so consuming that it causes problems with work, relationships or other areas of life.

With the easy availability of information on the internet, the patient absorbs what he wants to and becomes more anxious. Although hypochondria is a long term condition, one does not have to live constantly worrying about health. Psychological counseling, medications or simply learning about it may help ease worries. Make sure that the info is from a reputed medical web site.

Man versus Mosquito

Malaria kills more than one million people every year. Mosquitoes pass on the malarial parasite while drawing out blood. They can find their way in the dark to reach victims using their acute sense of smell. They have special receptors that allow them to sense compounds in sweat. The CO₂ exhaled by humans also attracts them. The antennae of the mosquito are densely covered with fine hairs which trap odour molecules, triggering a nerve impulse in the mosquito. Scientists are now want to neutralize the mosquitoes’ sense of smell. Robots take chemicals from the substance library and interact with genetically modified receptors (that mimic mosquitoes) to identify and narrow down the range of suitable chemicals. This is followed by trials on real mosquitoes. A cocktail of substances has been discovered that blocks the insect's scent receptors. These chemicals are deposited in the hair of the mosquito and impair their sense of smell. The odour blind mosquitoes can not locate their life partners nor their victims.

Kalpavruksha of a sort

Miscanthus is a type of grass that can grow four meters tall. It is used a natural screen around other crops to break wind and to stop soil erosion. It is also used in making degradable flower pots and insulating bricks. The cellulose in miscanthus may be converted to alcohol or the dried grass can be mixed with wood chips, pelletised and burnt directly as a fuel. The energy required to plant to the energy derived from the crop is 1 to 2 for grape-seed, 1 to 5 for corn and 1 to 15 for miscanthus.

Miscanthus is undemanding and withstands wide variations in temperature and humidity. It is believed that Miscanthus will become increasingly popular with farmers as an energy crop.

Benefits of baby sitting

Chimpanzees are our closest relatives in evolution. Chimpanzees who reach adulthood at age 13 lived another 15 or 16 years. But humans generally live another 60 years or more. What may be the reason for our longer life span? In modern society, grandmothers often watch children. But a few million years ago, when primate grandmothers started doing that, they may have had a major effect on how human beings developed. If mothers decided to feed their children themselves, they would not be able to give birth as often. They would just be too busy finding food. That is where the grandmother can help. Scientists believe it is a big reason why humans live much longer than other primates. Caring for their daughters' children may have caused genetic changes that, in turn, caused older females to live longer. Those changes were eventually passed down from one generation to the next. Other primates are not as lucky.

- compiled by Dr. Palanki Balakrishna

Quotes by Warren Buffet (b. 1930)

***On Earning:* Never depend on single income. Make investment to create a second source.**

***On Spending:* If you buy things you do not need, soon you will have to sell things you need.**

***On Savings:* Do not save what is left after spending, but spend what is left after saving.**

***On Taking Risk:* Never test the depth of the water with both the feet.**

***On Investment:* Do not put all eggs in one basket.**

***On Expectations:* Honesty is a very expensive gift . Do not expect it from cheap people.**

- Compiled by A. Srilakshmi, Assistant Professor (CSE)

Mahaveer Educational Society

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

Anjamma Agi Reddy Engineering College for Women

Vyasapuri, Bandlaguda, Keshavgiri PO., Hyderabad 500005.

EAMCET Code: AARW, JNTUH Code: 8P

Phone: (91) (40) 65810046. www.anjamma.ac.in

Principal and Newsletter Editor: Dr. Palanki Balakrishna, principal.8p@gmail.com

Committed to Education, Emancipation and Empowerment of Women