Newsletter

# Mechanical Aspire

Achievements in Sports, Projects, Industry, Research and Education

#### **External Recognition**

Dr. A.K.Lakshminarayanan, Listed as a Technical Committee member by the organisers of 2nd Global Conference on Materials Science and Engineering (CMSE 2013) which will be held by Hubei University of Science and Technology in the city of Xianning, Hubei Province of China, during Nov. 20~22, 2013 (http://www.cmseconf.org/Committee.html), 02 June 2013.

Dr. A.K.Lakshminarayanan, Accepted the invitation from International Journal of Surface Coatings and Technology, Elsevier publication to serve as a reviewer, 18 June 2013.

Dr. A.K.Lakshminarayanan, Reviewed a research paper for Materials Science and Engineering - A, Elsevier publication in the area of Welding, 18 June 2013.





- Dr. K. Babu, Reviewed a research paper titled "From high accuracy to high efficiency in simulations of processing of dual phase steels" for Metallurgical & Materials Transactions B, Springer publication, 20 June 2013.
- Dr. K. Babu, Presented an invited talk on "Effectiveness of Non-traditional optimization algorithms" and handled a hands-on session on Particle Swarm Optimization in a Short Term Training Program on Essentials of Optimization Techniques in Engineering organized by Government Engineering College, Thrissur, Kerala, 11 June 2013.

#### Department Update

Dr. N.Nallusamy, Published the following two papers in the journal of Advanced Materials Research: 1. Spray characterisitics of diesel and biodiesel in direct injection diesel engine and 2. Experimental study on the spray characteristics of diesel and biodiesel (Jatropha oil) in a spray chamber. Vol. 768 (2013). June 2013.





Dr. M.S.Alphin, has been granted financial support to attend and present paper at the 20 th International Conference on sound and Vibration, Bangkok during 07-11 July 2013 under CSIR Foreign Partial Financial Assistance scheme.

Read on Dr.K.S. Vijaysekar's tribute to TMS at...

http://vijay-sekar.blogspot.in/2013/06/tmsthe-voice-of-era.html

### SSN emerges Sixth among all private engineering colleges in India

GHRDC-CSR Engineering College Survey 2013 Result has been published in Competition Success Review Magazine of July Edition 2013 and is also available for viewing at the website http://ghrdc.org/website/EnggSurveyResult2013.html

CSR-GHRDC Engineering Colleges Survey 2013



# Ranking of Top Participating Private Engineering Colleges

Rank	Name of the Engineering College
1)	Birla Institute of Technology - Mesra, Ranchi, Jharkhand
2)	Thapar University, Patiala, Punjab
3)	Manipal Institute of Technology, Manipal, Karnataka
4)	Dhirubhai Ambani Institute of Information and Communication Technology (DA-IICT), Gandhinagar, Gujarat
5)	Institute of Technology (Nirma University), Ahmedabad, Gujarat
6)	SSN College of Engineering, Kalavakkam, Tamil Nadu
7)	Sikkim Manipal Institute of Technology, Rangpo, Sikkim
8)	K. L. University (Koneru Lakshmaiah Education Foundation), Guntur, Andhra Pradesh
8217	

#### Attention GET.....

Have you come across people who say you can do more and got angry with them... Then read on.. You actually can do more....



A bird lover brought many eagles and left them in his garden full of trees. All eagles would soar very high in the air and then return whenever he called them. But one eagle never even tried to fly. It was just sitting all the while.

Any amount of effort by the person did not yield result. He invited his wise teacher to solve the problem. The teacher did something and the eagle was flying high. The person was surprised. He asked hsi teacher, "What did you do, Sir?"

The teacher explained,

"I just cut off the branch where it was sitting. When the comfort of the branch was not available any more, it started testing its skills."



We are all made to fly -- to realize our incredible potential as human beings. But instead of doing that, we sit on our branches, clinging to the things that are familiar to us. The possibilities are endless, but for most of us, they remain undiscovered. We conform to the familiar, the comfortable, the mundane. So for the most part, our lives are mediocre instead of exciting, thrilling and fulfilling. We should learn to destroy the branch of fear we cling to and free ourselves to the glory of flight!!!

#### Reflections on life as GET...



Anish P. Karthik, Alumni, First Batch

Stepping into work life from college could be an unsettling experience for most people. It means leaving your comfort zone of classes, really friendly professors and endless lawn sessions with peers. It means being a professional and all the neat adjectives that accompany it. Every organisation that you guys get placed into are not very different from a closed system operating in equilibrium, or at least was operating in equilibrium till you guys get into the system wearing those proud GET tags. Since you unsettle the equilibrium it would do the same on you too.

It really is no joke that most of the issues that you guys face are people related. Really machines or computers are not that bad after all. Lessons in management that are rooted in psychology namely figuring out what type of person your boss is whether dominant, influential, steady or cautious and which language he/she understands best - auditory, visual or kinesthetic. Such knowledge can save hours literally hours of effort that you put in a task or assignment. Honestly it's much easier and less painful to learn from another's mistakes than your own. Here's a list of functions that you are likely to encounter in your organisation:

#### Firstly the HR.

These guys are responsible for making you feel comfortable in the organisation. In a mid tier manufacturing concern their role is more likely to be limited to giving you canteen coupons and giving training classes. In a big manufacturing firm their role is broad which means they are quite influential. In firms like Mu sigma or Beroe or other software/services firms relationship with HR could decide your promotion.

To deal with an influential HR it's best to speak in a language they understand. Give them and their training activities utmost importance. Here subjects like soft skills, non verbal communication are extremely important since most of us don't do a good job of hiding our emotions. You cannot not communicate! In the first few days of your training take extreme care to look good and submit assignments on time, it would save you some extra effort later on. First impression is technically the first and last.

Other departments: Procurement and supply management would have more to do with quality systems and production planning. Marketing and other support functions require more soft skills than core knowledge.

Working in a team: It's unlikely that you will gel with the team in the first few weeks. For some it might take longer, it is completely natural and you should not expect a perfect work culture that you see in sitcoms. In these cases it pays off to be seen in the team, have visibility. Take initiative and organise any outing or lunch when the opportunity arises.

If your work gets appreciated, share the credit with your supervisor or buddy who might be mentoring you lest you instigate insecurity or jealousy among your seniors. Here it's more useful to learn how to project your work once you do a fantastic one.



Find your way through the Corporate Maze..

Golden rule - each department has its own unsaid rules so watch what you speak.

There is no necessity to be overtly friendly to everybody

Senior managers, VPs talk in terms of reducing lead time and improving process efficiency leading to cost savings. It would definitely help to brush up engineering economics and manufacturing systems.(As you proceed up the ladder you will be judged on how well you

can relate engineering with business not by your marks scored in UG)

#### Feedback from Alumni





Sanofi Pasteur, the vaccines division of Sanofi, is the largest company in the world devoted entirely to human vaccines.

Sanofi Pasteur offers the broadest range of vaccines in the world, providing protection against 20 bacterial and viral diseases.

Sanofi Pasteur distributes more than 1 billion doses of vaccine each year, making it possible to vaccinate more than 500 million people across the globe.

Venimadhavan Raghavendran, Alumni, first batch, now Intern - Procurement at Sanofi Pasteur

Hope you are doing great. Hope the department is reaching great heights. I am listing out my experience in North Carolina State University, for our Newsletter.

The education system and the independence offered is a big plus in the US universities. This university's Industrial and Systems Engineering program offers a lot of courses all the different dimensions of Industrial Engineering. Apart from the academic knowledge gained, the recruitment system in the US is designed in such a way that it requires a lot of networking and street smartness to get a job. The aspect of searching jobs will enrich you with these qualities as it has done for me. (I do not think I was very good in networking etc, but now I have some confidence)

Overall, It is a brilliant opportunity to learn, make friends from all over the world and inculcate some critical skills. Master's education has reinforced what Bachelors in an esteemed college like SSN taught me. I believe this is one of the right decisions I have taken. Thank you sir for giving me an opportunity to share my experience.

Innovation Update 1- Suicide proof ceiling fan

Innovations happen when there is a serious application!

A doctor, hurt by the number of suicides happening using ceiling fans, went about thinking how to design a ceiling fan with built-in safety features so that it can't be used as a tool of death. A week of hard thinking and several trips to the welders and mechanics later, Dr. Sharma had come up with a solution.

The device has a hollow metal tube inside the fan's shaft to which the motor and blades are attached. Hinged to the shaft are four heavy springs designed to take an additional weight of 25 kg besides the motor and the blades. The moment the limit set for the optimum weight is exceeded, the springs uncoil, leading to a soft landing of the person without stretching of the neck or straining the noose, Read the story at <a href="http://toi.in/AUehKb">http://toi.in/AUehKb</a>

## Innovation Update 2- The road of tomorrow is electric

Consider a future where trucks and buses continuously are supplied with electric power without carrying large batteries. Instead, power lines are built into the surface of the road. This could be a future solution for long-distance trucks and buses running on electricity. Volvo is just doing the reverse-instead of overhead cables- underground power line!-why should each car carry its battery pack-why not copy what electric trains do? Get full info at

http://news.volvogroup.com/2013/05/23/the-road-of-tomorrow-is-electric/





Innovation Challenge

CVDC - Commercial Vehicle Design Challenge 2013

Motorindia is launching the first edition of **Commercial Vehicle Design Challenge**, inviting students and industry professionals from across the CV industry to **IDEATE**, **INNOVATE** and **CREATE** futuristic designs towards improving transportation efficiency. The contest focusses on all Commercial vehicle segments like Trucks, Tippers, Trailers, Light Commercial Vehicles and Buses.

#### The entries need to:

- Be Presented in the form of a white paper
- Have a Feasibility report
- Be Supported with a 3D modeling



A total of 6 prizewinners will be awarded based on the below performance parameters:

- Fuel Efficiency
- Environment Friendly
- Innovation
- Ease of Transportation / Comfort
- Cost Competitiveness
- Safety



Shortlisted participants will present their designs to a jury comprising of industry experts.

Winning designs will be featured in the January 2014 edition of Motorindia

The Best Design Model will be showcased at Auto Expo 2014

The Winner will be sponsored a trip to attend the Auto Expo 2014

Last Date for sending in entries is 30th of September 2013

http://www.motorindiaonline.in/motorindia-commercial-vehicle-design-contest-2013/