Newsletter

Volume 6, Issue 12, December 2016

# Mechanical Aspire

Achievements in Sports, Projects, Industry, Research and Education

#### All About Nobel Prize- Part 36

**Interesting Facts on Laureates** 

**1.Robert Lucas**, winner of the 1995 Nobel Prize in Economics for his work on the theory of "rational expectations," split his \$1 million prize with his ex-wife.

If there were a Nobel Prize for Foresight or Timing, she should be nominated, based on a clause in their divorce settlement from seven years earlier: "Wife shall receive 50 percent of any Nobel Prize." The clause expired on October 31, 1995. Had Lucas won any year after, he would have kept the whole million.

- 2. Einstein's Nobel Prize money went to his ex-wife, Mileva Maric, as part of his divorce settlement.
- **3.Physicist Lise Meitner**, whose work helped lead to the discovery of nuclear fission, was reportedly nominated for the Nobel Prize 13 times without ever winning
- 4. People who refused the prize:
- **a)Le Duc Tho** was awarded the 1973 Nobel Peace Prize with Henry Kissinger for their roles in brokering a Vietnam cease fire at the Paris Peace Accords. Citing the absence of actual peace in Vietnam, Tho declined to accept.
- **b)Jean Paul Sartre** waved off the 1964 Nobel Prize in Literature. His explanation: "It is not the same thing if I sign Jean-Paul Sartre or if I sign Jean-Paul Sartre, Nobel Prize winner. A writer must refuse to allow himself to be transformed into an institution, even if it takes place in the most honorable form."
- c)Afraid of Soviet retribution if he traveled to Stockholm to claim his prize, **Boris Pasternak** declined to accept the 1958 Prize in Literature, which he'd earned for Doctor Zhivago. The Academy refused his refusal. "This refusal, of course, in no way alters the validity of the award. There remains only for the Academy, however, to announce with regret that the presentation of the Prize cannot take place." Yevgeny Pasternak accepted the prize on behalf of his deceased father in 1989.
- d)Swedish poet **Erik Axel Karlfeldt** won for Literature in 1918. He did not accept because he was Secretary of the Swedish Academy, which awards the prize. He was given the award posthumously in 1931. This was allowed because the nomination was made before Karlfeldt died -- no candidate may be proposed after death
- **5.Big names who never won:** Dmitri Mendeleev, Leo Tolstoy, Virginia Woolf, James Joyce, Marcel Proust, Mark Twain, Gertrude Stein, Henrik Ibsen, Joan Robinson, Thomas Edison, Nikola Tesla, Jules-Henri Poincaré, Raymond Damadian and Mahatma Gandhi.
- **6.The Curie family is a Nobel Prize machine,** winning five: Pierre and Marie for Physics in 1901; Marie solo for Chemistry in 1911; daughter Irene and her husband Frédéric Joliot-Curie for Chemistry in 1935; and Henry Labouisse, who was married to Pierre and Marie's daughter Eve, accepted on behalf of UNICEF in 1965.

Reproduced from http://edition.cnn.com/2009/LIVING/wayoflife/10/06/mf.nobel.odd.facts/index.html?iref=nextin

# Info to Alumni- Campus Update



**External** Recognition

Dr.P.Balaji writes..

I am glad to inform that our President Mrs. Kala Vijayakumar and Principal Dr. S.Salivahanan felicitated our student S. Arun (I Year Mech) for his excellent achievement in the Asian Roller Skating championship held recently at China....





I am glad to inform that our student B.V. RAMYA TULASI from final year Civil Engg department has bid by the Chennai Smashers team for the Premier Badminton League for the year 2016- 17. One more proud moment for SSN...

# CITY PLAYS

# Watch him skate his way to China

#### Rahul Ravikumar

hennai is quite the breeding ground for young talent in sport, whether they're popular or niche. Eighteen-year-old Arun Sathianarayanan, the latest to emerge from that pool, is now in the spotlight after winning the bronze at the 17th Asian Roller Skating Championship in Lishui City (China) last month.

Arun's now-ten-years tryst with roller skating started on foreign soil. "It happened when my parents and I were on vacation in Toronto in 2005. We visited a skating rink in the city, and a few figure skaters really caught my eye. I pestered my parents to buy me a pair of skates, and they agreed." he recalls.

On coming back to Chennai, the then seven-year-old Arun enrolled at a roller skating academy near Marina Beach where he acquired the basic know-hows of the sport. "The rink over there is not that big, but it is quite popular in our city. I spent two months with them."

His professional sojourn started after coming under the tutelage of Pavan Kumar Akula. "He's my coach even now. We train in a rink at Shenoy Nagar. He's a really good, experienced coach. He's a national champion himself, not to mention that he's trained a 100-plus skaters," he explains.

In the 10 years between



Arun Sathianaryanan

that moment and his recent wins, Arun has built up quite a skating resume for himself. Apart from representing India at 2012, 2013 and 2016 editions of the World Championships (in New Zealand, Taiwan, an Italy, respectively), he also raked in a haul of 31 gold, 34 silver, and nine bronze medals from district, state and national championships.

"I remember the national gold that I won in 2008. It was my first gold and national medal. It's a big motivation for me," he beams. Currently part of the mechanical stream at the SSN College of Engineering, Arun has his hands full with his academics and sports.

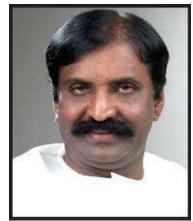
"Before college, I used to practice twice a day. Now, I do so only in the evening," he explains. "Plus, since I've missed out on nearly a month-and-a-half of college, I have to spend a bit more time taking re-tests. It may sound hectic, but I feel refreshed after a session on my roller skates. It helps me focus better while studying."

The news as covered in "The City Express" of Nov 10, 2016

# Scholarship Award Function

The Scholarship Award Function was held on 1st Nov 2016 at Justice Pratap Singh Auditorium.

The Chief Guest was Hon'ble Mrs. Justice Prabha Sridevan, Former Judge, Madras High Court. The Guests of Honour were Thiru. Kaviperarasu R. Vairamuthu, Tamil Poet and Lyricist and Mr. Ravi Appasamy, Managing Director, Residency Group of Hotels.



"ஆசிரியர் பணி அறப்பணி . அதற்காக உன்னை அர்ப்பணி "

நீங்கள் கொடுத்து வைத்தவர்கள் பயில்வதற்கு உதவித் தொகையுடன் தகுதியான இடத்தில் வந்து சேர்ந்ததினால் நீங்கள் கொடுத்து வைத்தவர்கள் .

உள்ள 600 கல்லூரிகளில் 300 மூடத்தக்கவை .தமிழகத்தில் என்று அனந்தகிருஷ்ணன் அவர்கள் பத்திரிகையில் எழுதி திரு ஒரு இருப்பதைப் படித்தேன் மீதி உள்ள 300 கல்லூரிகளில் சிறந்த கட்டமைப்பு வசதிகளில் உங்கள் இடத்தில் கல்லூரி முதல் இருக்கிறது . எனவே ħιβ சிவ நாடார் அவர்களை யாரும் பாராட்டாமல் இருக்க முடியாது .

இங்கு அறிவூட்டி , பொருளுட்டி எதிர்காலத்திற்கு வழியும் காட்டுகிறார்கள் . திரு நாடார் அவர்கள் கல்வியின் தயாரிப்பு என்று கூறினார்கள் . நீங்களும் கல்விக்கு உங்களைத் தயாரித்துக் கொண்டு உலகைத் தயாரிக்கப் புறப்படுங்கள் . உங்களுக்குப் போட்டி உள்ளுரில் அல்ல . மாஸ்கோவில் , லண்டனில் , வாஷிங்டனில் , பிரிஸ்பேனில் இருக்கலாம் . எனவே , உலகோடு போட்டி போடத்தயாராகுங்கள் .

எனக்கு நம்பிக்கை இருக்கிறது - இவர்களால் மட்டும் தான் இந்தியாவை வல்லரசாக்க முடியும் .

உங்கள் மூளை நல்ல அற்புதமான மூளை நீங்கள் வையத்தலைமை கொள்ளத்தக்கவர்கள்

மைக்ரோசாப்ட் தலைவர் பில் கேட்ஸ் ,''உங்கள் நிறுவனத் அவர்களிடம் நிறுவனத்தில் உள்ள அனைத்து இந்தியர்களும் இந்தியாவிற்குத் திரும்பிச் சென்று விட்டால் என்ன செய்வீர்கள் ?" என்று கேட்ட போது அவர் ,"எனது நிறுவனத்தையே " என்று சொன்னாராம் . இந்தியாவிற்கு மாற்றி விடுவேன்

பெற்றோருக்கு ஒன்று சொல்வேன் -எந்தப்புற்றில் எந்த பாம்பு இருக்குமோ **என்று உங்கள் பிள்ளைகளை** சந்தேகப்படாதீர்கள் எந்தப்பூவில் எந்தத் தேன் இருக்குமோ என்று மகிழ்ச்சியாய்ப்பாருங்கள் .

மாணவர்களுக்கு ஒன்று சொல்வேன் -நீங்கள் மதிக்க வேண்டியது பெற்றோரை மட்டுமல்ல ஆசிரியர்களையும் தான் . ஐம்பது ஆண்டுகள் ஆனாலும் ஆசிரியரை மதிக்கின்றவர்கள் வாழ்வில் உயர்வதைக் கண்டிருக்கிறேன்

ஆசிரியர்களுக்கு ஒன்று சொல்வேன் -கடைசி வரிசையில் உட்கார்ந்திருக்கிற மாணவனைத் தத்தெடுத்துக் கொள்ளுங்கள் . அவன் ஏதோ ஒரு குடும்பச் சூழலால் கவனம் சிதறி இருக்கலாம் . அவனுக்கு கலங்கரை விளக்கமாக இருங்கள் .

இது வழக்கமான கொண்டாட்டமல்ல . இங்கே வராதிருந்தால் , என் வாழ்வில் ஒரு நல்ல திருநாளை இழந்திருப்பேன் .

மாணவர்களே , உங்கள் குடும்பத்திற்கும் , உங்கள் கிராமத்திற்கும் முகவரி கொடுங்கள் . நீங்கள் விண்ணைத் தாண்டி வளர்க என வாழ்த்தி விடை பெறுகிறேன் .



I am truly honored to be here. I love the picture on your Annual report. Perhaps it symbolises SSN as the wheel that enables the parents (pots) to get their children blossom into good flowers.

Your Institution talks about Transforming Education. It is a different kind of education that transforms you. Swami Vivekananda says, "Education should be capable of bringing in a transformation".

Children spend more time with teachers than with their parents.

So, a teacher must be more responsible and should be capable of transforming the child.

All along, bravery and skill are treated as manly traits; love and jealousy are treated as womanly traits. This in not true. It is possible for a man to be caring and also possible for a woman to be brave. Differentiations like man/ woman, rural/urban etc are all mind related and can be easily overcome. You must learn to respect equality. I hope SSNites will appreciate this.

Equality is attained not when offered by others but when felt by the individual.

You are all gifted to be receiving education in this Institution.

You must all dream that no Indian should be left behind without education and work towards that. I congratulate all of you. God Bless You.

# **Internal Projects Sanction**

Project Statistics mentioned by President

Year	Number of Student Projects	Value in Rs.Lakhs
2012	28	5
2013	50	11
2014	100	20
2015	135	26
2016	150	30



On November First, 2016, a function was conducted to distribute the sanction letters for internally funded projects. Mechanical team received 20 UG projects, 6 PG projects and 3 Faculty projects. Thanks to the Management for such a gesture.

#### Info to Alumni- Department Update

#### **External recognition**

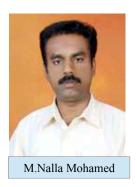
Dr. M S Alphin, Associate Professor, Reviewed a Journal paper for Journal of the Energy Institute, Elsevier.

Dr. A.K. Lakshminarayanan Assoc.Prof, reviewed 4 research articles for Materials and Manufacturing Processes, Taylor and Francis Publication; Reviewed research article for Journal of composite structures (Elsevier), Journal of Nuclear Materials (Elsevier), Ceramics international (Elsevier), Materials & Design (Elsevier) and Journal of Mechanical Science and Technology (Springer)









Dr K.Rajkumar ,Asso. prof. , reviewed a paper titled "Evolution of mechanical properties and microstructure of different cryogenically treated hot die steel AISI-H13" for the International journal of Materials Research

Dr.M.Nalla Mohamed was invited to review a research paper titled "Transient Dynamic Impact Suppression of a Baja Chassis Using Frontal and Rear Shock Absorbers", by International Journal of Crash worthiness Taylor and Francis.



Professor V.E.Annamalai was invited to review a paper titled, "Mechanical and wear behaviour of ceramic composites for grinding wheels: effect of the sintering temperature" for the International Journal of Applied Ceramic Technology.

Dr.G. Selvakumar, Assoc. Prof., was invited to deliver a lecture in Faculty Development Program on 'Engineering Mechanics' organized by PSN College of Engineering and Technology (Autonomous), Tirunelveli on 30.11.2016.

#### **Research Publications**

Dr. K. Jayakumar, Associate Professor has published a technical paper titled "Optimization of  $\mu$  - wire electrical discharge machining parameters of Inconel 718", Vol. 11, 2016, pp.147-150 in The Journal of Manufacturing Engineering (ISSN: 0973-6867). Co-authors are from NIT, Calicut.





Dr. N. Nallusamy, Professor, published a paper "Experimental investigation of performance, combustion and emission characteristics of CI engine fuelled with Chicha oil bio-diesel", International Journal of Ambient Energy, 2016, DOI: 10.1080/01430750.2016.1206036, co-authored by P. Tamilselvan and K. Vignesh





Mr. B. Jayakishan, Asst. Prof., DME, SSNCE, Published a paper "Evaluation of Performance, Combustion and Emission Characteristics of a Compression Ignition Engine Using Methyl Esters of Mahua Oil", GRD Journal for Engineering, vol 1, issue 12, Nov 2016, co-authored by N. Visveshwar, student, SSN CE.

Dr. S .Soma Sundaram co authored a paper titled "Numerical Analysis of the Effect of Gravity on a Laminar Diffusion Flame Using OpenFOAM" presented in Asian Congress of Gas Turbines held at IIT Bombay. The other authors are T. S. Arul, Naveen Yesudian and Sankar Raju.

# **Research Activity**

Dr M.Nalla Mohamed, Asso.Professor Convened PhD Doctoral Committee meeting for Ph.D provisional Confirmation of Mr. Praveen kumar.A (1514299713) on 17.11.2016.Dr. Shahul Hamid Khan B, Assistant Professor, Dept. of Mech. Engg.,IITD&M,Kancheepuram was the external member for the Meeting.[17-11-2016]

#### **Programs Attended**

Dr M S Alphin and Dr. B. Anand Ronald, Associate Professor, attended Faculty development program on "Creative oriented teaching Learning process and non-academic revenues" organized by Karunya University, Coimbatore. [16-11-2016]

Dr.B.Anand Ronald, along with Mr. Amit Tyagi, Asst. Marketing Director and Dr. Seyezhai, Assoc. Prof./EEE attended the Facilitation workshop conducted by Entrepreneur Development Institute of India, at St. Peter's Engg. College, Avadi [23-11-2016]

Dr.R.Prakash, Prof.V.E.Annamalai and Mr.B.Jayakishan attended a workshop on Status and Future of End-of-Life Vehicle (ELV) Recycling in India, on November 25, 2016 at Auditorium, IIT Madras Research Park.

#### **Industrial Visit**

Dr. A.S. Ramana, Asso. Prof, accompanied M.E. Energy Engineering students for a visit to Centre for Fuel Cell Technology, Chennai. [4-11-2016]

#### Student Activity

Ram Kishore, G Vignesh, S Vigneshwaran, IV Year, presented a paper titled "Preparation of Aluminium metal matrix composites - A Review" at the National Conference on recent innovations and advanced trends, AVIT [26-10-2016]

# Faculty Write up 1

#### FDP on

"Creative Oriented Teaching Learning Process & Non- Academic Revenues"



Dr. B. Anand Ronald and Dr. M. S. Alphin, Assoc. Prof/ Mech., attended the IEEE - PES sponsored FDP on "Creative Oriented Teaching Learning Process & Non- Academic Revenues", (COTLPNAR), held at Karunya University on 16 Nov. 2016.

Around 60 participants from different institutions, had attended the program.

The first session was handled by Dr. KN Ponnani, BITS Pilani, Goa, on the topic "Income Generation for private universities—the non traditional way".

The second and fourth sessions were handled by Dr. Evelyn Brindha, BIT, Sathy.

The third session was on "Preparing Video Lectures" by Mr. Nair Vishal Vijay and Alex J. Timothy, AP, Media Technology, KU.



# Faculty Write up

Report on Visit to International Advanced Research Centre for Powder Metallurgy and New Materials, Centre For Fuel Cell Technology (ARCI-CFCT), Chennai.

By Dr.A.S.Ramana

I had the opportunity to accompany first year M.E. Energy Engineering students to visit Centre for Fuel Cell Technology, Chennai on 4<sup>th</sup> Nov 2016. Dr. K. Ramya, Sr. Scientist explained components, features and research works on various types of fuel cells at CFCT. Aspects related to different systems including the fuel cell thermal management for efficient working of fuel cells were highlighted.



Dr. K. Ramya, Sr. Scientist and Dr. R. Balaji, Scientist with visiting members

Dr. R. Balaji, Scientist described the production, storage and utilization of hydrogen in fuel cells. Materials preparation, characterization and testing facilities were shown to the visiting members. The visit concluded with an interactive session that focused on fuel cells application and research prospects. The visit was useful and informative.

We are thankful to Dr. N. Rajalakshmi, Sr. Scientist and Team Leader, CFCT for granting permission to visit their organization.

#### Student Feedback on Intranet

Dr.N.LakshmiNarasimhan had introduced Audio files in Intranet for Fluid Mechanics. A Student's feedback..

This is Suraj from Mech B Third semester. The question paper was easy today and I did well. The audio files which you sent was very useful during preparation and if at all this technique is used in the future this could reach many students because this could be listened whenever they are free . And in a good mood too. The audio was very clear sir I mean that there was not any disturbance in the audio. How did you do that Sir?? Did you use any filter?

# **Industry Interaction 1**

Prof.V.E.Annamalai was invited to deliver a Guest Lecture on "Innovative Problem Solving- TRIZ" at Ashok Leyland, Ennore, on 8<sup>th</sup> November, 2016.

Thanks to Ashok Leyland Team Mr.Sivakumar S.S (Learning & Dev) Mr.Thennarasu B (TQM – Ennore Mfg) Mr.Arulmani P (TQM Coordinator) Mr.Sundaram N (Mission Gemba) Mr.Prakash K.S (TQM) Mr.Karuppiah S.A (Central Quality)



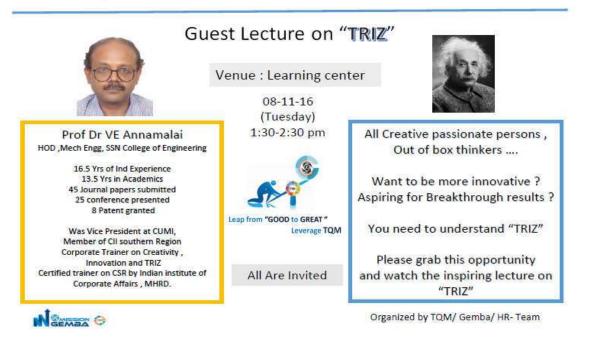
Mr.Thennarasu, who initiated the contact,
had created a big hype
by displaying a large (4 ft x 3 ft) poster
In their canteen, which resulted in a large turnout of audience

A Section of the audience

The Poster..

# Quality Month Celebration





Ashok Leyland has been a close partner, permitting internships and projects for our students. We also have joint publications. They have been one of our regular Recruiters.

Recently, they allowed our faculty Dr.M.S.Alphin, to intern for a week at their Noise Vibration and Harshness Lab. This Lecture is part of what we can do for them. Thanks to the Senior Management team of Ashok Leyland for permitting and sustaining this relationship.

# Industry Interaction - 2

# **Machinery inspection at Vendor premises**

Dr.S.Sureshkumar, alongwith Sabarinathan (Junior Research Fellow), visited Sai Services, Bengaluru, on 19-11-2016. The purpose of the visit was to inspect the equipment ordered for Coated Abrasives Pilot Plant, under the DST-SERB project on Abrasive Waste Management [VeA & SSK]



The pilot plant has the capability of producing coated abrasive discs. The process comprises of coating an adhesive to a backing, electrostatically projecting the abrasive grains on the adhesive and curing the product at appropriate temperatures. Necessary curing ovens are also getting ready. The visit ensured that the equipment is capable of meeting our needs. It has been cleared for despatch.

#### Mech Marvel - 24

A marvellous idea of combining Solar energy and desalination to support Farming-Reaping unbelievable results Read what they claim-VeA



# Sundrop Farms

Sundrop technology doesn't exploit nature, it works in harmony with it.

"We use it to harvest solar power to supply us with energy. Hydroponic greenhouses that don't use soil encourage the plants we grow to flourish. Water treatment creates fresh water from the sea or brackish sources to irrigate our crops."

"All we need is sun and seawater to grow food all year round. With no need to rely on the weather or soil quality, our methods provide economic and community benefits, and are better for the planet too.

That's called a triple bottom line. We call it making everyone a winner."

#### So what's so wrong with traditional agriculture?

There's a price to be paid for those shiny apples you crunch into, and for the lettuce and the tomatoes that you add to your salad. And it's much higher than the one your supermarket or greengrocer charges you.

Today's agricultural processes demand huge amounts of energy and extract vast quantities of dwindling water from the earth. It's a wasteful way to grow produce that often requires nasty chemicals. Even worse, it's dramatically impacted by bad weather and disease, so prices fluctuate wildly.

Ultimately today's agricultural methods are not sustainable for producers, consumers or for the planet. The world needs a revolution. And it's already begun.

#### It's time to rethink

#### Pure genius

Our processes don't consume water, they create it.

Traditional farms need vast amounts of finite ground and surface water resources to grow produce.

Sundrop Farms need neither. Our desalination process produces freshwater that is pure and distilled, with no need for chemical treatment.



Because fossil fuels are for dinosaurs. Traditional greenhouses that use fossil fuels are prehistoric compared to ours.

At Sundrop Farms we use sunlight to cool, heat and run our growing environments, so we're not adding to the world's output of C02.



#### Keeping costs consistently low

How do we avoid passing on volatile water and energy costs to our consumers?

We don't use either in our production processes. Instead we turn to abundant, renewable inputs like sea water and heat from the sun.

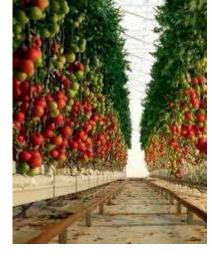
An everlasting supply of sunshine and sea water to grow food in arid lands

If you are a traditional farmer, you'll need water and energy to grow your produce. And you'll need lots of it.

The challenge is that they are finite resources that are becoming ever scarcer. Our solution? Not to use them!

We don't extract groundwater from the planet at unsustainable rates. We don't rely on fossil fuels. And we don't use soil or valuable farmlands.

Instead we've developed technologies that integrate solar power, electricity generation, fresh water production and hydroponics. It produces an equivalent quantity of food to that grown using traditional methods, but the quality is significantly better.



#### You can't beat our system.

We use the sun's energy to produce freshwater for irrigation. And we turn it into electricity to power our greenhouse to heat and cool our crops.

Our ventilation also uses seawater to help cool the greenhouses, and we re-use water again and again.

The only bottom line that most companies worry about is profits.

However we firmly believe business should be a force for good and benefit more than its shareholders.

So as well as being in profit, our mission is to also benefit the environment and the local community in which we operate.

Together they are known as "People, Planet and Profits". And we consider ourselves in the black on all three accounts.



# At Sundrop Farms there is only one season

The growing season. Our technology ensures optimal conditions for our plants to produce delicious tasting fruit and vegetables all year round .

#### Minimum waste, maximum taste

We control the climate and irrigation inside our greenhouses and ensure our fruit and vegetables have exactly the right levels of nutrients, light, water, temperature and carbon dioxide needed to thrive.

Plants are grown hydroponically, which is the technical way of saying we don't use soil. Our plants flourish on nutrient-rich coconut husks instead.

The big advantage of farming this way is the control it gives us over plant nutrition levels. It ensures better produce and a better taste, too. Water is reused and there is minimal waste.

#### State-of-the-art technology. But we weed and pick produce by hand

Our growing methods are revolutionary. Our produce is extraordinarily good. But there's nothing unnatural about our processes.

Unlike traditional agriculture our plants are kept in an ideal environment using the most sustainable methods possible. We even control plant eating bugs with carnivorous ones, just the way nature intended.

And our gardeners weed and pick produce by hand.

We believe that our sustainable production methods are the future of agriculture. Tomorrow's world is a delicious one.



# Port Augusta, Australia - Case Study



In 2010 we began operating Sundrop Farms' first commercial greenhouse facility in South Australia. The greenhouse is situated at the top of the Spencer Gulf, near the city of Port Augusta. Given the lack of fresh water and the harsh climates, traditional horticulture isn't feasible in this area. With the help of our proprietary technologies, we have been growing delicious, natural and high-quality produceusing Southern Ocean seawater and sunlight since then.

In 2014, we broke ground on a 20 hectare greenhouse which was completed in 2016. It uses a state-of-the-art solar tower to produce energy to power the plant growing systems and to heat and cool the greenhouses as required.

It is 115m high and has 23,000 mirrors pointed at it. Our water once again comes from the Spencer Gulf, and is desalinated using our cutting edge thermal desalination plant.

All this technology goes into growing delicious tomatoes for Coles Supermarket, which can be found in stores nationwide.





More info and videos, vist <a href="http://www.sundropfarms.com/">http://www.sundropfarms.com/</a>

#### Corporate Story 24



We may all know Mahindra Group through their cars and jeeps. What we don't know is their strength in steel. Of late, they are venturing into End-of -Life vehicle recycling, which is a totally new business area in India. They are putting up plants to receive used vehicles, crush them and recover whatever possible.

The industrial giant we know today as Mahindra & Mahindra (M&M) took birth during 1947, diversifying from steel trading to manufacturing and allied activities.

Steel trading continued to be a core activity for the M&M group, post independence, and was handled by its Intertrade Division. Post liberalisation, a need was felt to provide value-added services for steel processing which gave birth to MSSCL – Mahindra Steel Service Centre Ltd. – located at Kanhe (near Pune). MSSCL was the first steel service centre in the organised sector in India and focused on Just–in–Time (JIT) delivery of processed steel to its customers, a concept hitherto unknown in the country.

Around the same time, the group felt that since its steel trading and processing operations had expanded considerably, it may help to convert the steel vertical into an independent subsidiary. Mahindra Intertrade Ltd. was thus born in 1999.

Intertrade is the pioneer in the steel processing space in India – or steel service centres as they are commonly called. Intertrade set up the:

1st steel service centre in India in the organised sector 1st electrical steel service centre in South Asia 1st steel service centre abroad by an Indian entity

Intertrade operates steel service centres at Pune, Nashik, Vadodara and Bhopal in India, and at Sharjah, UAE.

#### Companies

- Mahindra Intertrade Ltd. MIL
- Mahindra Steel Service Centre Ltd. MSSCL
- Mahindra MiddleEast Electrical Steel Service Centre (FZC) MME
- Mahindra Auto Steel Pvt. Ltd. MASL
- Mahindra Electrical Steel Pvt. Ltd. MESL

They aspire to be an end-to-end solutions provider in the flat steel processing space.

In the new millennium, more than ever before, the success of a business depends not only on the products offered, but also on quality, service, reliability and sustainability all put together.

In tune with changing market dynamics, Intertrade's focus is on customer centricity, quality and value creation and this is reflected in the company's Mission, Vision and Strategic Goals. Intertrade's current and future growth plans are driven by the two mantras of *proximity* and *service*.

Mission: Customer delight through value creation will be an article of faith in our pursuit of sustainable growth

Vision To achieve sales of 2 million tpa of steel, by 2018

#### What they do

- 1.For Automotive- Blanking / Profile Blanking , Slitting / Shearing / Cut-to-length:
- 2. For Power-Slitting / Transformer Lamination Core stacks / Built up Transformer cores
- 3. For Home Appliances Stampings
- 4. For Trading Steel and Scrap Trading

The Steel Trading Group (STG) primarily focuses on import of flat steel products. It is one of the leading suppliers of steel to the transformer and automotive industries in India sourcing the bulk of its steel from mills in Japan, South Korea and Taiwan.STG has evolved from being indenting agents to a value provider for its customers in the steel supply chain and offers services such as sourcing, warehousing, financing and logistics.

Scrap Trading-Metals Group (MFA) provides sourcing and financing services for:

- · Shredded scrap
- Heavy Melting Scrap (HMS): HMS 1:2 (80:20) and HMS 1
- Stainless steel scrap
- Plates and structures (PNS)

#### 5. Financial and Logistics Services

Warehousing facilities

- Logistics solutions
- Financing, and,
- · Protection against forex risks

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#### 6.Tyre and Rubber Testing Machinery Group

Tyre and Rubber Testing Machinery Group (RMT) provides sales, after-market sales and service for:

- Tyre uniformity machines, Tyre dynamic balancing machines, Tyre geometry inspection systems and Tyre X ray machines sourced from **Micro-Poise Measurement Systems LLC**, USA.
- Rheometers, Viscometers, Tensile testers, Tyre cutting and tyre plunger machines sourced from U CAN Dynatex Inc., Taiwan.
- Online and Offline Profilometers sourced from Starrett Bytewise Measurement Systems, USA.
- DBP Oil Absorptometers and Pallet hardness testers sourced from **HITEC Luxembourg S.A.**, Luxembourg.
- Preformers, Cryogenic deflashing machines and VibraCool cooling conveyers sourced from Barwell Global Ltd., UK.

#### 7. High Pressure Air and Gas Compressors Group

Intertrade represents **CompAir, UK** (now part of Gardner Denver Limited, UK) and offers solutions for industrial gas compression. With a broad range of air and water cooled compressors supplying gases up to 1700 m3/hr at 414 bar g, CompAir's high pressure range is capable of compressing many common and specialist gases with reliability.

#### Careers

A blend of enthusiastic and passionate youngsters make Intertrade a great place to work.

They offer a collaborative work environment with emphasis on teamwork, care, transparent communication and an opportunity for career growth. They share a bond of trust with their employees who take pride in being a part of the Intertrade family. They truly believe that diverse thoughts and experiences make a great team, giving them that competitive edge in the demanding markets in which they work. For this reason, they try to provide equal opportunities to every person who applies to them and every employee who works with them.

#### Mahindra Intertrade has been ranked:



#### Interested in being a part of the Intertrade family?

Take the first step and mail your CV to : intertrade.hrd@mahindra.com

# Amazing Innovation- 1



# **Stopping a Speeding Car**

Mounting to the front of a standard police truck such as a Tahoe, the Grappler is specifically designed to disable the rear wheel of a vehicle in a police chase, bringing them to a quick and safe stop without the use of the PIT manoeuvre that involves nudging the fleeing car so it spins around.

When you're coming up behind the bad guy, you hit a button to deploy the Grappler, then more or less run into the back of his car with the center of your car in line with one of the fleeing car's rear wheels.

A large yellow net is hung between two extending posts, and it quickly gets grabbed by the tire and hauled up and over, where it wraps itself around the axle, brings the wheel to an abrupt stop (and the other rear wheel too, if it's got certain types of rear differential). It often grabs with such force that it rips the tire right off the rim.

On a rear wheel drive vehicle, that's often enough to drag the car to a stop by itself, but with front wheel drive cars, once the rear wheel is locked up, the police driver can keep a tether connected to the wheel, create some separation between the two vehicles, and then drag it to a halt using the tether line and his own brakes. It's very effective, and stops the car in a straight line so it can be used even in heavy traffic.

The Grappler can be disguised as a bicycle rack for unmarked vehicles or tactical operations, but otherwise looks like a pair of horns on the front of the car. <a href="http://www.policebumper.com/">http://www.policebumper.com/</a> <a href="http://www.policebumper.com/">https://www.policebumper.com/</a>

# Amazing Innovation- 2

# **Square Hole Cutter**

Quadsaw cuts square holes in plaster walls. That makes it very handy for installing power points, light switches and other electrical bits and pieces, and ... not much chop for anything else.



It smashes that job, though. Connecting to the end of a drill, Quadsaw can be set to drill squares or rectangles with its four straight cutting blades. It's got a height gauge (a stick you can elongate to make sure all your switches are at the perfect height) and a built-in spirit level to keep things straight.

It makes one annoying and fiddly job much quicker, cleaner and easier. According to the Quadsaw people, electricians cut 200 million square holes in walls a year, in the United Kingdom alone. Moving to Quadsaw makes these things so much faster that at an average worker pay of UK£20 per hour, this thing could save the British building industry a whopping UK£320 million per year.

Watch the splendid cutter in operation at http://newatlas.com/quadsaw-square-hole-drill/46261/

# Amazing Innovation- 3

# Vertical storage solution for cycles

There are already plenty of products that let cyclists save floor space by parking their bicycles vertically against the wall. Almost all of those systems, however, require users to lift their bikes up so that the front wheel can be placed in a wall receptacle or over a hook. The Lithuanian-designed Parkis makes things easier, by doing the lifting *for* the rider.

To use Parkis, cyclists just wheel their bike into it front-first. As soon as the front wheel engages the built-in dolly, a spring pulls that dolly vertically up a wall-mounted rail, pulling the bike along with it. All the user has to do is keep their hand on the saddle, to help guide the bicycle as it goes up.



When it's time to retrieve the bike, the user just grabs the saddle and pulls back on it, causing the dolly to slide back down. Watch the video in the link

It can be seen in use, in the following video. https://youtu.be/pm4Nqlt-vvw



Adidas plans to make one million pairs of recycled shoes in 2017

# Amazing Innovation- 4

Shoe from Ocean Plastic Waste

Adidas has teamed up with environmental organization Parley for the Oceans to make recycled shoes, which draws the plastic waste materials from the coastal areas of the Maldives. The two joined forces last year to help increase awareness and drive new technologies to retrieve and recycle ocean plastic debris. They first produced a limited run of 50 recycled plastic shoes last year, and are now bringing the eco-minded footwear to market.

The knitted upper part of Adidas' UltraBoost Uncaged Parley trainers is made from a mix of 95 percent recycled ocean plastic and recycled polyester. The rest, such as the laces, heel cap and lining is made from recycled materials.

More info at <a href="http://news.adidas.com/Global/Latest-News/ALL/adidas-and-parley-for-the-oceans-unveil-first-performance-apparel-and-footwear/s/8c4261c6-1cdd-4d64-a7f3-3e2825980866">http://news.adidas.com/Global/Latest-News/ALL/adidas-and-parley-for-the-oceans-unveil-first-performance-apparel-and-footwear/s/8c4261c6-1cdd-4d64-a7f3-3e2825980866</a>

# Important Info to students

# Single test for multiple jobs through LinkedIn

- In an effort to make it easier for young job seekers in India to find work, LinkedIn now allows candidates to apply for a range of positions with a single online standardized test that they can take through its <u>Placements</u> program.
- The assessment test will help people qualify for more than 1,000 openings at 25 major companies that have a presence in India, including HCL, Samsung, Airtel, Amazon, Tech Mahindra and Cognizant.
- LinkedIn partnered with HackerRank, Aspiring Minds, Wheebox and CoCubes to build its standardized test. At present, it's designed for applicants interested in tech gigs, but the company noted that it's working to add support for roles in other industries soon.
- In addition to the standardized test, Placements also hosts practice and learning material, so candidates are better prepared to take it.
- The test questions are grouped by type and difficulty levels; this allows recruiters to filter their search for candidates by their performance in different sections of the assessment.
- The company is betting on Placements to grow its own team too. This year, LinkedIn will skip campus visits in India and recruit technical talent from universities and colleges exclusively through its new platform.
- It'll be interesting to see if Placements, with its new assessment tool, is successful in India; LinkedIn
  hopes that it will allow students in smaller towns and cities to apply for and secure jobs in prominent
  companies just as easily as if they lived in major metropolitan areas. It could also help level the playing
  field for candidates competing for jobs with people from higher-ranked schools, but that remains to be
  seen.
- <u>Placements</u> is already live; you can <u>sign up</u> with an existing LinkedIn profile or create a new one and take the test right away.

Source: http://thenextweb.com/in/2016/09/12/linkedin-now-has-a-standardized-test-to-help-students-in-india-land-tech-jobs/

Leading global professional network <u>LinkedIn</u> has signed an agreement with the human resource development ministry to create more job opportunities for Indian students.

As part of the MoU, LinkedIn's 'Placements' product will be adopted by all Indian colleges affiliated with All India Council for Technical Education (AICTE), the company said.

'Placements' provides a level-playing field for all students, regardless of their location or college and allows them to take an online assessment test, which gives them direct access to thousands of openings in 35 top corporates in India.

'Placements' was piloted in November 2015 and then LinkedIn opened the product in September 2016 to students at all colleges and universities in India. In less than eight weeks from the launch, over two lakh students registered for the product and there were over 1.2 million job applications.

Source: http://www.thehindubusinessline.com/news/education/linkedin-inks-mou-with-govt-to-create-jobs-for-students/article9295875.ece

This article was published on November 2, 2016

#### Info from Alumni

# Attention: M.S. aspirants

#### as written to Dr. Lakshminarasimhan N

Srinivasan of 2012-16 batch, is currently doing his Masters at Delft University, Netherlands.

While at SSN, he was one of the ardent believers in documenting, who initiated the documentation of Crank-X as a Process.

He continues documenting his experience at Delft-VeA



This is Srinivasan writing from Delft, The Netherlands. I hope this e-mail finds you in good health. First I would like to apologize for taking such a long time to send you an e-mail. I was held up with a busy schedule and exams (which got over recently) but that is no excuse.

The purpose of writing this email is to share my experiences as a Master's student which may help prepare the current students at SSN with aspirations for higher studies after Bachelor's. Also with this email, I have shared some information on the research that is taking place at TU Delft especially with respect to Energy Storage which you had asked for.

To begin with, many of the courses here have both assignments and examinations (held every quarter). Some courses are completely assignment based. So it is essential that we get back to the lessons on a daily basis.

Sometimes we need to secure a satisfactory result in the assignments to be eligible for sitting an examination.

Many of the courses here have a recorded video of the lectures uploaded online which aid in learning. Some courses have ppts with voice overs which we can listen to at home.

I saw in the last edition of Aspire magazine that you are recording explanations of concepts in Fluid Mechanics so that the students can use them anytime to learn. I wish that it was available when I was at SSN.

Finally, the way in which the examinations are conducted is totally opposite to that of the University examinations held back home.

We are allowed to take our bags inside the hall and keep it beside us for the duration of the examination. Even food is allowed inside the hall! These are some of the aspects which I found to be different when comparing with my experiences at SSN.

The current students can spend some time after the final semester to try and prepare for these changes before leaving for their Masters study.

Another aspect of the M.S. application which I want to voluntarily talk about is SOP.

My roommate, also from India, is guiding his juniors in writing their SOPs. I read the SOPs he has been receiving and wanted to reach out to my juniors at SSN.

An important point which I want to emphasize is that 'not all achievements are important'. The key is to phase all related projects, internship and achievements under a bracket and relate them to the M.S. program.

Another important factor is relating how the M.S. program will help the candidate to achieve future goals.

On the topic of Energy Storage, there two kinds of research that is going on: Batteries and Solar Fuels.

As far as Thermal Energy Storage is concerned, there is no work going on here although I heard that this year research on Thermal Energy Storage has been started. I don't have that much information on that because this topic comes under the department of Mechanical Engineering and my study MSc Sustainable Energy Technology falls under the department of Electrical Engineering.

If you want a more detailed account of TES research, I'll talk to more friends at the Mechanical Engineering department and try to gather more information.

As far as Solar Thermal Research is concerned, projects are carried out on replacing steam with supercritical CO2, organic Rankine fluids or Nano fluids as working mediums for novel power cycles.

I have decided to specialize in the track 'Energy and Society' which deals with implementing Renewable Energy. I aim to work either on Climate Change or Implementation of Sustainable Energy Technologies. I don't know what triggered this shift from a solar-based specialization to 'Energy and Society. There were a lot of options available and after talking to the professors about the various profiles, I have chosen this.

I highly recommend the MSc Sustainable Energy Technology program to students of Mechanical, Electrical and Chemical Engineering who want to do Renewable Energy. Also a track Energy and Process Technology is available under MSc Mechanical Engineering which is highly suited for Solar Thermal and OTEC.

That is all I have to say at this point of time about TU Delft sir. Srinivasan

# Alumni Tracking



Gopinath V of 2008-12 batch is now Deputy Manager at ICICI Bank, Bengaluru. He has switched to banking after two and a half years in FL Smidth.

Sameera Kumar of 2012-16 batch is now Production Engineer at MRF Tyres Hyderabad





Chandrasekaran V, of 2011-15 batch is now GET at Mitsubishi Hitachi Power Systems India Pvt. Ltd , Bangalore

Prabhu J, of 2008-12 batch, is now Lead Engineer at FLSmidth, Chennai



# Valeo Innovation Challenge 2017

Deadline: 2017-01-31 Award: €100.000

Attention: Auto Enthusiasts



The aim of the contest is to reward an innovative automobile-related project (technological innovation or idea for a new way to use cars) that is the product of the imagination of students worldwide.

Valeo launched the 4th edition of its contest, the "Valeo Innovation Challenge 2017", which offers students from around the world and their academic teachers the opportunity to become players in automotive innovation.

They are required to come up with an innovation which would, between now and 2030, make the car and the way it is used more intelligent, clean, intuitive, green and fun.

Participants are being asked to develop bold solutions for the society of tomorrow.

#### **Enter Contest Here:**

Valeo Innovation Challenge 2017

# Challenges by Govt of India

Attention: Students / Faculty





I wish to bring to your kind attention three major innovation competitions organized by Govt of India where students in groups and faculty can participate. These competitions are;

- 1. Innovation Challenge from Indian Railways open from 20th Nov 2016 to 05 Feb 2017
- 2. National contest on Social Innovation, Pravasi Divas open from 9th Nov. to 05Dec. 2016
- 3. Smart India Hackathon'2017 open from 9th Nov to 15th Dec 2016. Hackathon consists of 500+ subtopics and one may find some area of special interest.

HoDs may please bring these competitions to the attention of our students and encourage them to form groups for participation.

Details of the competition can be found in the website <a href="https://innovate.mygov.in/">https://innovate.mygov.in/</a>

Should you require any assistance please feel free to get in touch with either me or Amit with best wishes and regards V G Idichandy

SSN Innovation Center

# Research News from MSP

#### Dr.Muthu Senthil Pandian SSNResearch Centre



1 Research Journal in Tamil from IITM

அறிவியல் , பொறியியல் மற்றும் தொழில்நுட்ப ஆய்வு நூல் TAMIL JOURNAL OF SCIENCE, ENGINEERING and TECHNOLOGY

அறிவியல் , பொறியியல் மற்றும் தொழில்நுட்ப ஆய்வு நூலின் முதல் இதழ் , ஐந்து விமர்சன ஆய்வு கட்டுரைகளை (Research Review Articles) கொண்டுள்ளது . இவற்றை படிக்க , கீழ்காணும் வலைப்பக்கத்தை பார்க்கவும் ,www.vinanie.com/tjsett

இந்நூல் , அனைத்து அறிவியல் , பொறியியல் மற்றும் தொழில்நுட்ப துறைகளிலும் விமர்சன ஆய்வு கட்டுரைகளை (Research Review Articles) வெளியிடும் . Those interested in publishing shall submit their article in English. The editorial team will take care of translation. Tamil Journal of Science, Engineering and Technology is edited by Dr. K. Vijayaraghavan of the Department of Chemical Engineering, IIT Madras

- SERB has opened the Call for Proposals under Extra Mural Research (EMR) Scheme, on November 1. Eligible Researchers can submit the proposals till **December 31, 2016**.
- Science and Engineering Research Board (SERB) calls for applications for organizing technical meetings, seminars, conferences, symposiums, workshops and short-term training programs under Assistance to Seminar / Symposia scheme [Open since Nov 10] Apply online.
- DST calls for proposals in three tracks
- 1. Advanced Manufacturing Technologies (AMT) Program 2nd Call for Proposals (<a href="http://www.dst.gov.in/callforproposals/advanced-manufacturing-technologies-amt-program-2nd-call-proposals">http://www.dst.gov.in/callforproposals/advanced-manufacturing-technologies-amt-program-2nd-call-proposals</a>)
- 2. Waste Management Technologies (WMT) Program 2nd Call for Proposals (http://www.dst.gov.in/callforproposals/waste-management-technologies-wmt-program-2nd-call-proposals)
- 3. DHI-DST Technology Platform for Electric Mobility (TPEM) 1st Call for Proposals (http://www.dst.gov.in/callforproposals/dhi-dst-technology-platform-electric-mobility-tpem-1st-call-proposals)
- PSG Institute of Advanced Studies, Coimbatore is conducting a two day training programme on "High resolution Transmission Electron Microscopy, Scanning Electron Microscopy and Scanning Probe Microscopy" on 9th and 10th Dec 2016. The details of the workshop are available at <a href="http://www.psgias.ac.in/wp-content/uploads/2016/11/emspm-brochure-2016.pdf">http://www.psgias.ac.in/wp-content/uploads/2016/11/emspm-brochure-2016.pdf</a>
- 6 Some sites for downloading Ph.D.Theses

**Shodh Ganga - UGC Official Website** (Download all Indian Universities PhD Thesis from this site) <a href="http://shodhganga.inflibnet.ac.in">http://shodhganga.inflibnet.ac.in</a>

Cochin University of Technology (CUSAT) http://dyuthi.cusat.ac.in/xmlui/handle/purl/1

VirginiaTech - University Libraries - VtechWorks http://vtechworks.lib.vt.edu/browse

DORAS - DUC Online Research access service http://doras.dcu.ie/view/theses/type/doctoral.html

# Forthcoming Faculty Development programs

- Mech engg dept of Sardar Patel College of Engineering [SPCE] is organizing a short term training program on "Nanoscience and Nanotechnology: Fundamentals, Synthesis and Applications" from 02<sup>nd</sup> January 2017 to 07<sup>th</sup> January 2017.

  Brochure of the programme with registration form is available on following link <a href="http://www.spce.ac.in/Documents/News&Events/brochure-Nanotech\_2015\_V5.pdf">http://www.spce.ac.in/Documents/News&Events/brochure-Nanotech\_2015\_V5.pdf</a>
  Fee Rs.2,500 for students and Rs.5,000 for faculty.
- Mechanical Engineering of Sri Venkateswara college of Engineering (SVCE) is organizing an Faculty Development *Program on "ME6601-Design of Transmission Sysytem"* during 12<sup>th</sup> to 16<sup>th</sup> December 2016. Register by Dec 2<sup>nd</sup>.
- Faculty Development Training Programme on "ME6404 Thermal Engineering" to be conducted from 13/12/2016 to 19/12/2016 at University College of Engineering Villupuram.
- Department of Mechanical Engineering, SRM University is conducting a six day Faculty Development Programme on "Development, Manufacturing and Analysis of Advanced Composites (DMAAC'16)" during **Dec 14-20,2016**. Prof. Debes Bhattacharyya, Distinguished Professor, Department of Mechanical Engineering and Director of the Centre for Advanced Composite Materials, University of Auckland, New Zealand will be the course faculty. Link for Registration: <a href="mailto:goo.gl/xNE2nv">goo.gl/xNE2nv</a> registration by December 10. Fee Rs.6,000 for faculty and Rs.4,000 for Students and Scholars
- The Department of Mechanical Engineering, NITK Surathkal is conducting following GIAN course, "Hybrid Composites: Manufacturing, Mechanics and Materials", during December 18-22, 2016.

  Registration fee Rs.2,000 for faculty and Rs.1,000 for students. Last date for registration Dec 10. Course faculty Dr. Pavana Prabhakar, an Assistant Professor of structural mechanics in the Department of Civil and Environmental engineering at the University of Wisconsin-Madison (mamel.engr.wisc.edu), where she leads the Manufacturing and Mechanics Lab (MaMeL).
- The departments of Civil Engineering & Automobile Engineering of Rajalakshmi Engineering College have proposed to conduct a Faculty Development Programme (FDP) on "Engineering Mechanics" from 13<sup>th</sup> December to 20<sup>th</sup> December 2016 at Rajalakshmi Engineering College. This FDP Programme will be useful for those who are involved in teaching Engineering Mechanics course (GE 6253) at UG level. The programme will mainly focus on the syllabus of Engineering Mechanics, prescribed by Anna University. Hands-on training on problem solving using MATLAB would be given.

# Forthcoming Workshops for students & Scholars

The Dept of Energy and Environment, NIT Trichy is conducting a 'Hands-on workshop on Computational Fluid Dynamics' from 12th to 16th December, 2016. Research persons and students are invited to participate in this workshop.

The workshop is focused on hands-on training in numerical modelling (MATLAB) as well as simulation (ANSYS). The practical and theoretical sessions will be handled by experts from industries and academic institutions. Last date to register Dec 3. Fee RS.4,600.

The Design Innovation Center (DIC) of IIITD&M Kancheepurm organizes one day workshop on Design For Manufacture and Assembly (DFMA) on 15th Dec 2016. Last date for registration Dec 7. Fee Rs.1,500 for students and Rs.2,000 for faculty.

The Department of Mechanical Engineering of Kingston Engg College is organizing Two day National workshop on "Emerging Technologies using Renewable Energy sources(ETRES)" on 16<sup>th</sup> & 17<sup>th</sup> December 2016. Apply before Dec 10<sup>th</sup>. Fee RS.1,000 for students and RS.2,000 for Faculty.

For Details : <a href="http://engineering.kingston.ac.in/file/pdf/workshop.pdf">http://engineering.kingston.ac.in/file/pdf/workshop.pdf</a>

For Registration: https://goo.gl/forms/0SEkgHa0uVFuIZq83

Three Days Winter Internship Program is planned during 15-17 December 2016, by the Department of Nanoscience and Technology, Sri Ramakrishna Engineering College, Coimbatore. The internship will provide exposure in interdisciplinary areas of Science, Engineering and Technology in broad areas like Mechanical, Electronics and Communication, Electrical and Electronics, Biotechnology, Medical, Agricultural and Basic Sciences. The event will be an eye opener for those who are interested in stepping into the nano world.

# Forthcoming Conferences

#### December 2016

- Aurora's Scientific Technological & Research Academy, Hyderabad, in association with IEEE EDS Hyderabad Chapter. is conducting First International Conference on Recent Innovations in Engineering and Technology (ICRIEAT) on 22-23 December 2016. Submission deadline of full length papers Dec 5th. More details at www.icrieat.com
- National Conference on "Disaster Mitigation, Responsiveness and Management" is being held at SSN College of Engineering, Chennai during Dec 28-29, 2016

#### March 2017

- International Conference on Nanomaterials and Nanotechnology (ICNANO-2017), 1-3 March 2017, Vinoba Bhave Research Institute (VBRI), Allahabad-221508, Uttar Pradesh
- S K P Engineering college, Thiruvannamalai has planned to conduct two day Second International Conference on Design and Advances in Mechanical Engineering (ICDAME 2017) on March 3 & 4, 2017 Abstract Submission by Jan 2<sup>nd</sup>.
- Shree L. R. Tiwari College of Engineering, Thane, is hosting a 2 Day International Conference on 'Emanations in Modern Technology and Engineering' on March 4th and 5th, 2017. Submission of papers by Feb 5<sup>th</sup>. More details at conference website www.icemte.org
- International Conference on Recent Innovations in Production Engineering (RIPE-2017), 24-25 March 2017, Department of Production Technology, MIT, Anna University, Chennai. The last date for submission of full length paper is 31<sup>st</sup> December 2016. **Details at <a href="http://www.mitindia.edu/Mit upload materials/department/RIPE%20Brochure%20Final.pdf">www.ripe2017.mitindia.edu/Mit upload materials/department/RIPE%20Brochure%20Final.pdf</a>**

#### April 2017

First International Conference on Renewable and Sustainable Energy will be held at Hindusthan College of Engineering and Technology, Coimbatore, India during the month of April 2017. Abstracts by December 31. Fee Rs.2,000 for faculty and Rs.1,500 for students.

#### June 2017

- International Conference on Recent Advances in Materials, Mechanical and Civil Engineering (ICRAMMCE -2017), 1-2<sup>nd</sup> June 2017 at Marri Laxman Reddy Institute of Technology and Management, Hyderabad . Abstract due by Dec 10<sup>th</sup>. Fee Rs.10,000 for faculty, Rs. 8,000 for Scholars. Publication in Applied Mechanics and Materials. For more details please visit the conference website <a href="http://icrammce.com/">http://icrammce.com/</a>.
- 12th International Forum on Knowledge Asset Dynamics, St. Petersburg, Russia, is conducting an International conference on the theme Knowledge Management in the 21st Century:Resilience, Creativity and Co-Creation, during 7-9 June 2017, at the Graduate School of Management, St Petersburg University. 15 January 2017 Abstracts Submission Deadline

#### January 2018

Second International Conference on Science and Engineering of Materials (ICSEM-2018), 6-8 January 2018, School of Engineering and Technology, Sharda University, Noida-201306, Uttar Pradesh .Last date for Abstract Submission : 8th Sept. 2017

#### Forthcoming Student Competitions

1 Engineering Students Innovation Challenge 2017 (ESIC 2017)

To promote and guide the young aspiring engineering students on the innovation opportunity in fields of Engineering and Technology, the International Society for Scientific Research and Development [ISSRD] is announcing second series of the innovation challenge "ESIC 2017". It will be a platform for the Engineering and Technology college fraternity to showcase the innovation opportunities in Engineering streams. For more information please visit <a href="http://www.issrdconferences.org/">http://www.issrdconferences.org/</a>

The project should be sent to <a href="mailto:esic2017@issrdconferences.org">esic2017@issrdconferences.org</a>
The last date for submission is <a href="mailto:20th December 2016">20th December 2016</a>.

Please register through <u>www.isssrdconferences.org/Register.</u>

The applicants need to pay INR 750/- (Rupees Seven Hundred and Fifty only) towards the registration and screening process (per student).

Team submission can have maximum of four students.

# Bannari Amman Institute of Technology (BIT), Sathyamangalam

BIT is organizing the eighteenth edition of Futura – the mega Technical Fest and Project Design Contest, during 23-25 January 2017. It is an event of technological repute, a periodical stock- taking of achievements, crystal gazing of technological bonanza and novelties.

"Our flagship event is the "Project Design Contest". It is an honor to promulgate that our Project Contest is in association with "Make In India" Initiative, which focuses on Projects and Funds provided by India and to India. We plan on giving away an amount of Two Lakh Rupees for the top projects. In total, a prize bag worth Fifteen Lakh Rupees awaits your students.

We have plans lined up for each of our fifteen departments. For event details of each department, I request you to kindly go through our website <a href="www.bitfutura.in">www.bitfutura.in</a>. We have a list of workshops and events offered by various departments of Engineering to abrogate young minds. You can get a detailed list of events <a href="here">here</a>."

# Info from Industry Partners

#### Global Research Trend on Robotics



Ms.Deborah Devadason,a former colleague at Carborundum Universal, is now "Consulting Partner – Business Excellence" at Tech Mahindra, San Francisco Bay Area, USA. She has sent this info on latest trends in Global Research, to be shared to our students- VeA

The latest trend in Robotics is "Petrobot"a Eurpoean project supported by a Consortium of Petroleum companies, aiming at robots for petroleum Industry applications.

The PETROBOT project aims to develop a series of robots which can be used by inspectors to conduct remote inspection of pressure vessels and storage tanks widely used in the oil, gas and petrochemical industry.

Currently the inspection of these tanks and pressure vessels is being done by people working inside these spaces which means the assets have to be shut down to ensure the safety of inspectors.

Furthermore, vessels have to be decoupled from live sections of the plant, extensively cleaned to remove all products that can emit flammable or toxic gases and rendered safe for entry. In larger vessels, scaffolding is erected so that all necessary areas can be accessed during the inspection.

The objectives of the PETROBOT project are to minimise the exposure of personnel to potentially hazardous conditions, to reduce downtime and to save resources by using robotic technology to end the above procedure, which is long and costly.

PETROBOT mobilises the complete value chain, including robot and inspection technology providers, inspection service companies and end-users. The inspection robots will be tested in the installations of the end-user consortium members. Special project activities aim at preparing the future user community to maximise the uptake of the new technology.

The ten-party project consortium comprises of the following participants:

- Shell Global Solutions International B.V., Netherlands
- GASSCO AS, Norway
- Chevron North Sea Ltd., United Kingdom
- Koninklijke VOPAK N.V., Netherlands
- A.Hak Industrial Services B.V., Netherlands
- Dekra Industrial AB DEKRA, Sweden
- Alstom Inspection Robotics (AIR), Switzerland
- OC Robotics, United Kingdom
- Innospection GmbH, Germany
- Quasset B.V., Netherlands

Attention
Robotics Enthusiasts
Started in 2013
with a duration of three years,
This project is nearing completion.
So, track the latest available robots for petroleum industry

PETROBOT is supported by an EU grant from the <u>FP7 Robotics program</u>. The project was started on September 1st, 2013 and has a duration of three years.

http://petrobotproject.eu/

# **Inspiring Life Stories**

A voyaging ship was wrecked during a storm at sea and only two of the men on it were able to swim to a small, desert like island. The two survivors, not knowing what else to do, agreed that they had no other recourse but to pray to God.

However, to find out whose prayer was more powerful, they agreed to divide the territory between them and stay on opposite sides of the island.

The first thing they prayed for was food. The next morning, the first man saw a fruit-bearing tree on his side of the land, and he was able to eat its fruit. The other man's parcel of land remained Mr/Kishore Babu barren.



Schwing Stetter

After a week, the first man was lonely and he decided to pray for a wife. The next day, there was a woman who swam to his side of the land. On the other side of the island, there was nothing.

Soon the first man prayed for a house, clothes and more food. The next day, like magic, all of these were given to him. However, the second man still had nothing.

Finally, the first man prayed for a ship, so that he and his wife could leave the island. In the morning, he found a ship docked at his side of the island.

The first man boarded the ship with his wife and decided to leave the second man on the island. He considered the other man unworthy to receive God's blessings, since none of his prayers had been answered.

As the ship was about to leave, the first man heard a voice from heaven booming, "Why are you leaving your companion on the island?"

"My blessings are mine alone, since I was the one who prayed for them", the first man answered. "His prayers were all unanswered and so he does not deserve anything."

"You are mistaken!" the voice rebuked him. "He had only one prayer, which I answered. If not for that, you would not have received any of my blessings."

"Tell me," the first man asked the voice, "What did he pray for that I should owe him anything?" The voice replied, "He prayed that all your prayers be answered."

Moral of the story: For all we know, our blessings are just not the fruits of our prayers alone, but those of others also praying for us. My prayer for you today is that all your prayers are answered. Be blessed. What you do for others is more important than what you do for yourself.

# Corporate Wisdom 36

From Desire to Deservingness



Change held long enough becomes a Culture.
Any change for that matter.



It is not about bringing in new systems into the organization. The question is can you sustain this long enough. It is not about introducing new measures of change but can you sustain it long enough. To put in the right context – much more than initiating the change, the responsibility of the leadership is to sustain the change long enough.

Only then you will experience the transformation, not otherwise. All great things in life were once a process that was held long enough for it to become monumental possibility. All of us have the opportunity to create this monumental possibility.

The next question is how do I ensure that there is sustained progress? This is the biggest challenge. Small beginning looks easy. Incremental improvement is slightly tough, but if we work on it every day by saying "Where can I improve today?" and also at the end of the day by asking a question "What did I improve upon today?" you are making a beginning. The biggest challenge is how do we sustain this progress?

#### The Vedas say,

"You do not get in your life what you desire, you only get in your life what you deserve".

One of the laws of life is "You do not get in life what you desire; you only get what you deserve".

How do you turn your desired into deservingness?

- Everybody desires health, the questions is do you deserve health?
- Everybody desires wealth, the question is do you deserve wealth?
- Everybody desires peace, the question is do you deserve peace?
- Everybody desires divine intervention, the question is do you deserve divine intervention?
- Everybody wants to be top performer, but do you deserve to be one?



#### Desires can become Deservingness through Consistent, Directed and Self-motivated Effort (CDSE).

Wishing you most & more

Ramakrishnan



Compiled and released by HoD Mech

Feedback to annamalaive@ssn.edu.in