Newsletter

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Aspire

Mechanical

Achievements in Sports, Projects, Industry, Research and Education

All About Nobel Prize- Part 53

Doodle on Indian-American Nobel Laureate

In January, Google Doodle celebrated the 96th birth anniversary of renowned Indian-American biochemist, Har Gobind Khorana, who won a Nobel prize in the field of genetics.

Khorana won the Nobel prize in Physiology or Medicine in 1968 for his work on discovering that the order of nucleotides in our DNA determine which amino acids are built. These amino acids, in turn, form the proteins which are responsible for the essential cell functions. Khorana shared this Nobel award with two other biochemists from the University of Wisconsin, namely Marshall W Nirenberg and Robert W Holle.

Khorana was born on 9 January 1922 in Raipur in Punjab, which is now in Pakistan. He was the youngest of five children. He started showing a flair for science at a very young age and this was nurtured by his father, who helped him and his siblings read and write. He lived in India until 1945. According to Google, scholarships helped propel the budding scientist through his scholastic journey, obtaining his doctorate in organic chemistry in 1948.

Khorana studied for a PhD at the University of Liverpool, then spent some time at the Eidgenössische Technische Hochschule in Zurich. Post that, he spent some time in India before returning to Cambridge to continue his research on proteins and nucleic acids. He conducted his research at universities in England, Switzerland and Canada.

Eventually, at the University of Wisconsin along with two other biochemists, Khorana's work won him the Nobel prize.
But that wasn't the end of it. Khorana is also credited with another scientific breakthrough when he constructed the first synthetic gene. He was also awarded the National Medal of Science during his lifetime.

Khorana passed away on 9 November 2011.

Bangalore-based illustrator Rohan Dahotre drew the Doodle of Jan 9th, which celebrates Khorana's pioneering work in understanding our DNA. The Doodle's reach is across India, Australia, Japan, New Zealand, North America and parts of South America and Europe as well. (reproduced from

http://www.firstpost.com/tech/news-analysis/har-gobind-khorana-nobel-prize-winning-biochemist-remembered-on-96th-birth-anniversary-on-google-doodle-4293899.html)

Info to Alumni- Campus Update

Principal's book launch...

The book titled **Digital Circuits and Design**, fifth edition, authored by Dr.S.Salivahanan and Dr.S.Arivazhagan, published by Oxford University Press, was released by Dr.M.Anandakrishnan, Former VC Anna University and Chairman, IIT Kanpur, at a function organized by IEEE at Anna University Campus on 9th April 2018.

Photo Courtesy: Dr Sethuraman

SSN Mech Invention featured in newspaper

Amit Tyagi writes…

An invention by third year Mechanical engineering students of SSN has been featured in DTNext[17/04/2018].

The publication has a circulation of 330,000 in Chennai. The clip is as below:

TN students develop shock absorbent bumpers

CHENNAI: Students of SSN College of Engineering in Kalavakkam have developed a low-cost prototype of a "cellular bumper", which is supposed to increase occupant's safety in case of a collision. The product, which is in the process of getting its patent, is expected hit the market soon.

In general, bumpers do not absorb the force of the impact in case of the vehicles collides with something; in such cases, the entire impact is transmitted to the passenger cabin. The cellular bumper, however, is expected to perform 200 times better than the usual ones, claimed the makers.

"Even though many safety devices such as crumple zone, air bag, collision sensors are available, they cannot absorb the impact energy as well as this bumper can," project leader Ankit Kumar told *DT Next*.

"Product testing was performed at ARAI Pune, a semi-government authorised test facility for certifying automobiles," he added.

According to Kumar, the test results proved that an increase of 219% crash energy absorption was achieved in terms of the cellular bumper as compared to the regular ones. "Hence, it can protect the occupants against fatal accidents much better than ordinary bumpers," he added.

Stating that the cellular structures have an attractive combination of physical and mechanical properties and are being increasingly used in modern engineering applications, Kumar said that they

Product testing was performed at ARAI Pune, a semi-government authorised test facility for certifying automobiles

can be used as crash absorbents due to their high capacity to absorb impact energy.

"During the impact, the inter-cellular walls buckle and collapse which results in impact energy absorption through deformation," the project leader said.

"Additionally, a layer of silicone rubbers is sandwiched between the cellular panels. This terminates large amount of shocks and vibrations. Thus, the passengers may feel only a tiny part of the impact," added Kumar.

He also said that the cellular bumper would cost about Rs 2,500 when it hits the market. Ankit along with his four partners won an award for their product in the international competition 'Valeo Innovation Challenge 2017' — 'Technological Innovation' where 1,628 teams from 748 universities in 80 countries had participated.

Other major events of April 2018..

On 4th April 2018, SSN Institutions celebrated its **22nd College Day** at Justice Prathap Singh Auditorium at 2 P.M. The chief guest who presided over the programme was Mr. Srinivasan Damodaram, Vice president, BFS, Cognizant Technological Solutions.

Info to Alumni- Department Update

External Recognition:

Dr.D.Ananthapadmanaban, Associate Professor reviewed a paper entitled Nonlinear Performance of Concrete Beam Reinforced with Prestressed Hybrid CFRP/GFRP Composite Sheet for the CMSE Global Materials International Conference to be held in Shaanxi,China,November 2018 [04/04/18]

Dr.R.Prakash, Associate Professor, Conference Session Chair : National Conference on Science, Engineering and Technology (NCSET 2018) at VIT Chennai.

Session Theme:Automotive Electronics.[02/04/ 18]

Dr. N. Nallusamy, Professor, reviewed the following two technical papers. (i) "Performance, Emission and Combustion Characteristics of a DI Diesel Engine using Blends of Punnai Methyl Ester and diesel as fuel" for "International Journal of Enterprise Network Management", Inderscience Publishers and (ii) "Experimental Studies on Premixed Charge Compression Ignition (PCCI) Engine Using Port Injection of Heated Diesel" for "Journal of Engineering Science and Technology", Taylor's University, Malaysia.[11/04/18]

Dr.L.Poovazhagan, Assoc.Prof./Mech., reviewed a paper titled "Traditional Approach And New Tools For Metric Buttress Thread Planetary Milling And Subsequent Turning on The CNC Machines " for the "International Journal of Automotive and Mechanical Engineering (IJAME)". [13/04/18]

Research Publications:

Dr.K.S. Vijay Sekar, Asso. Professor has his research paper titled "3D Finite Element Analysis of Slot Milling of Unidirectional Glass Fiber Reinforced Polymer Composites", coauthored by his PhD scholar C.Prakash, accepted for publication in the Journal of the Brazilian Society of Mechanical Sciences and Engineering, Springer, Indexed in Scopus and Thomson Reuters with IF: 1.235 and also indexed in Annexure 1, Anna University Journal list. [17/04/18]

Dr. N. Nallusamy, Professor, published a technical paper titled "Dimensionless analysis of spray characteristics of Chicha oil methyl ester and diesel fuel in a spray chamber" in Progress in Industrial Ecology – An International Journal, Vol. 11, No. 3, 2017, pp. 219-226. [Co-authors are Dr. Raghu Palani and Mr. Ganeshkumar Sundaramurthy, SVCE]. [12/04/18]

B Jain AR Tony (Full time scholar/Mech) and M S Alphin (Asso.Prof/ Mech.), Published a research paper titled, Assessment of ergonomically designed handle shapes for low-frequency vibration responses, Proc IMechE Part L: J Materials: Design and Applications , 1–10, IMechE 2018, DOI:10.1177/1464420718766961. Thomson Reuters Impact factor: 1.625. [13/04/18]

Research activity:

Ph.D Public Viva-Voce Examination of part-time research scholar, Mr. K. Bravilin Jiju under Dr.G.Selvakumar, Asso. Prof., Mech, was held in Seminar Hall. Thesis title: “Evaluation and Improvement in Geometric Accuracy of Components Processed Using Wire-Cut EDM”. [27/04/18]

C. Arun Prakash presented two research papers in the International Conference on Frontiers in Engineering, Applied Sciences and Technology (FEAST18) organised by NIT Trichy. The papers were co-authored by Dr. B. Anand Ronald, Associate professor and UG students Aravind S, Karthik S of 1st Year Mech, Sakthi Vigneshwaran SC of 2nd Yr Mech and Subramanian R, Vasudevan and Vigneshwara of 3rd Yr Mech.[27-28/04/18]

Programs Conducted:

Dr M S Alphin, Associate Professor, QLP was conducted for ME Manuf. II Sem. students in order to help students in selecting their guide for their project. Venue: Mech. seminar hall. [05/04/18]

Dr.L.Poovazhagan & Dr.K.Rajkumar, Assoc.Professors/Mech., organized one day workshop on "Machining of Advanced Materials".[06/04/ 18]

Dr M Selvaraj, Dr M Nalla Mohamed, Dr M S Alphin and Dr G Selvakumar, Associate Profs., Mech. Organised a two day National level workshop on FEA simulation on Impact and Vibration using ABAQUS, 43 external faculty participated in the program including participants from AndhraPradesh and Kerala. [12- 13/04/18]

Dr. B. Anand Ronald, Associate Prof., Mech., accompanied M.E (Manufacturing) students to Optomechatronics Lab of Engineering Design Dept of IIT Madras. [26/04/18]

Dr.S.Suresh Kumar and Dr. S. Soma Sundaram conducted a workshop on “Mechanical Engineering Failure analysis and New Product Innovation” for the first year students. [11/04/18]

Dr. N. Nallusamy, Professor, and Dr. M. Suresh, Associate Professor, conducted SAE-SSNCE sponsored three-day workshop on “Computational Fluid Dynamics – Practical Applications in Thermal Systems”. [05-07/04]

Department activity:

Dr. K. Jayakumar, Associate Professor, coordinated the verification of submission of all 3 unit test (UT) papers from all Mechanical Engineering subjects including UG and PG from the current semester. He also coordinated the academic audit work of all UT test papers along with HOD sir and Dr. R. Damodaram. [05/04/18]

Dr. K. Jayakumar

Dr. R. Damodaram

Industry Interaction:

Prof. VE Annamalai, HoD, was invited to be a member of the Manufacturing Panel of CII Southern Region, by the Convenor Mr.N.Anbuchezhian of Caterpillar.The first meeting of the panel was conducted on 6-4-2018.

Student activity:

A team has submitted an idea on "Smart Cabin System for Autonomous Vehicles" for the Valeo Innovation Challenge 2018, under the guidance of Dr. S. Suresh Kumar.Team members are: Manoj S , Namratha G , Navaneethakrishnan R Nirmal Kumar A

Team of four - R Srivasupradha, S Deva Prashanth, Srivarshith Viriyala, Vashist Valsaraj; One of the 53 finalists in the L&TTS TECHGIUM 2018; Presented on the problem statement - 'Tamper-proof technologies to prevent reprocessing of medical devices'; were recognized as INNOVATORS.

Vashist Valsaraj, 3rd Year Mech, 1.Inter year basketball, runners up 2.Discuss throw, Gold 3. Shotput, Silver

Arun Kumar, 3rd Year Mechl: Nasa Rover Challenge My teammates went USA for the NASA rover challenge and participated in the event representing India.
Gokul K, 3rd Year Mechanical, Won bronze medal in Silambam competition in KCT in Coimbatore.

Suresh M, 3rd Year Mechanical, Winner - Volleyball (Intra college)

Gopinath C, 3rd Year Mechanical, 1. NSS camp 2. Squash player (runner up)

Pratheeshh Kumar C.N., 3rd Year Mechanical, Won 3rd place in Blitzkrieg Quiz in MIT

R.Aravindkumar, 3rd Year Mechanical, Runner-up in intra college squash event

Other major events of April 2018..

- The valedictory function for the Department of Mechanical Engineering was held in the Mini Auditorium on April 3, 2018.

Faculty Write up

One Day Workshop on "**Machining of Advanced Materials"**

06.04.2018, Venue: Seminar Hall

Dr.L.Poovazhagan and Dr.K.Rajkumar organized a one day workshop on "Machining of Advanced Materials" on 06.04.2018. Around 65 participants (Faculty, Scholars, PG/UG students) attended the workshop, out of which 53 were external participants. The workshop was well received by all the participants. Lectures were delivered on the topic of Wire-EDM and Machining of composites. Demonstration of Wire-EDM machine was given by Dr.G.Selvakumar and S.Ram Prakash (Research Scholar).

Keynote speakers:

1. Dr.A.Gnanavel Baby (Associate Professor/Department Industrial Engg., Anna University)
2. Dr.G.Selvakumar (Associate Professor/Department Mechanical Engg., SSNCE)
3. Dr.K.Rajkumar (Associate Professor/Department Mechanical Engg., SSNCE)

Organisers

Dr.L.Poovazhagan

Dr.K.Rajkumar

Faculty Write up

Two Day Workshop on

"FEA simulation of composite structures-impact and vibration analysis using ABAQUS"

12-13.04.18 Venue: CAD Lab

A National level workshop on FEA simulation of composite structures impact and vibration analysis using ABAQUS was held on 12-13 April 2018, Dept. of Mechanical Engg, SSN College of Engineering, Chennai. 43 external faculty attended the course which include participants form Andhra Pradesh and Kerala.




The program covered research aspects of Composite structures analysis. The session focused on Impact and Vibration Analysis using ABAQUS. The resource persons for the program are Dr.K.Rajkumar, Dr.M.S.Alphin, Dr.M.Selvaraj Dr.M.Nalla Mohamed and Dr.S.Sureshkumar.

The participant's expressed usefulness of the course and hands on sessions using ABAQUS.

Event website: https://sites.google.com/view/fea-impact-vibration-workshop

The workshop was organized by Dr. M Selvaraj, Dr. M Nalla Mohamed, Dr M S Alphin and Dr G Selvakumar





Organisers


Dr.M Selvaraj


Dr. M Nalla Mohamed


Dr.M S Alphin


Dr.G Selvakumar

Prof. VE Annamalai was invited to be a member of the Manufacturing Panel of CII Southern Region, by the Convenor Mr.N.Anbuchezhian of Caterpillar.The first meeting of the panel was conducted on 6-4-2018. The theme for the year was adopted as "Manufacturing Competitiveness". On behalf of SSN, the possible use of student power was highlighted. The example of Mr.Kumarasubramaniam of Tube Investments, offering faculty internship to Dr.N.LakshmiNarasimhan and the outcome of 20 student interning projects was shared. All members wanted to explore this option.

Mr.R.Babu of Johnson Electric suggested that next meeting should happen at SSN campus so that all can have first hand idea of what can be done together with Academia.

Mr. G.Ravindran of L&T valves acted on this suggestion quickly, by offering to visit SSN immediately after the meeting. That was a pleasant surprise. He came to SSN and interacted with Dr.A.K.LakshmiNarayanan on Friction Stir Welding and with Dr.R.Damodaram on Friction Stir Processing. Dr.N.LakshmiNarasimhan briefed on the possibilities of student internships. Mr.G.Ravindran has promised to come back with more specific info after discussing with his team.

Faculty Write up

SAE-SSNCE sponsored three-day workshop on CFD

05-07.04.18 Venue: CAD Lab/Seminar Hall

Dr. N. Nallusamy and Dr. M. Suresh conducted SAE-SSNCE sponsored three-day workshop on “Computational Fluid Dynamics – Practical Applications in Thermal Systems” on 5th, 6th and 7th April, 2018. 27 participants attended the workshop.

On day-1 morning, Dr. N. Lakshmi Narasimhan from our department delivered the lecture on “Fundamentals of Computational Fluid Dynamics”. He also gave an introductory hands-on-session on CFD. In the afternoon, Dr.G.Kumaresan, Assistant Professor, Institute for Energy Studies, Department of Mechanical Engineering, CEG, Anna University delivered a lecture on “Application of CFD for solar thermal systems”.

On day-2 morning, Mr. Raju Govindarajan, Director-Engineering from Global Nodes Engg. Solutions Pvt. Ltd., Chennai, conducted a hands-on-session on “Design of heat exchanger using CFD”. In the afternoon, Dr.S.Somasundram from our department conducted a hands-on-session on “Analysing flow over cylinder using CFD”.

On day-3, Dr. N. Kulasekharan, AGM - Virtual Engineering, Fiat Chrysler Automobiles, Chennai, assisted by Ms.M.Athira, Senior Engineer from the same company, conducted a full day hands-on-session in “ANSYS Fluent” for simulations/applications of CFD. All the participants felt that this CFD workshop was useful to them.

Organisers

Dr. N. Nallusamy

Dr. M. Suresh

Faculty Write up

A write up by Dr. B. Anand Ronald…

Dr. B. Anand Ronald

Visit to IIT Madras - M.E (Manuf.) students

Second semester M.E (Manufacturing Engineering) students visited Engineering Design Department (OptoMechatronics Lab) on 26 April 2018. They were accompanied by Dr.B.Anand Ronald, Associate Professor, Mechanical. Students were first shown a video of Introduction to Lasers and application of laser in different domains like medicine, engineering. Then Prof. Nilesh . J. Vasa explained the role of lasers in micromachining. Then they were taken to Optomechatronics Lab (Engineering Design Dept.), where they were demonstrated the use of various applications of Laser like Condition monitoring, Texturing, microdimple formation etc.

Research Scholars of the Engg. Design Dept., explaining the applications of Lasers in different research domains

Faculty Write up

One Day Workshop on

"Particle Swarm Optimization (PSO), Simulated Annealing (SA) &Artificial Neural Network (ANN)"

06.04.18 Venue: M.E Lecture Hall

One Day Workshop on Particle Swarm Optimization (PSO), Simulated Annealing (SA) &Artificial Neural Network (ANN) was conducted on 6th April, 2018 by Dr. K. Babu; Dr. K.S. Jayakumar and Mr Vimal. The focus of this workshop was to introduce the concept and applications of Simulated Annealing (SA) and Artificial Neural Network (ANN), which are the important and newer optimization techniques. In addition, the above-mentioned topics were also a part of the core course "MF 7201- Optimization Techniques in Manufacturing" for PG (Manufacturing Engineering) of Anna University. Particle Swarm optimization is also included in this workshop because it is simple, easy to understand and code, which converges faster to the global optimal solution. The workshop started with a session on a brief introduction of the Optimization techniques followed by hands on Session on the above mentioned topics to enable the students, research scholars and faculty to get a clear understanding on the application of the tools .The workshop also included discussion on Case studies where the tools have been effectively used earlier for the benefit of the participants .

Organisers

Dr. K. Babu

Dr. K. S. Jayakumar

Mr. Vimal Samsingh

Faculty Write up

One Day Video Workshop on

"Mechanical Engineering Failure analysis and New Product Innovation"

11.04.18 Venue: Seminar Hall

In order to inspire research culture among First year students, Mechanical Engineering Department runs a regular program called **IRIS- Inspiring Research through Information Sharing**.
As part of IRIS, a workshop on "**Mechanical Engineering Failure analysis and New Product Innovation**" was conducted for the first year students on 11-4-2018 by Dr.S.Suresh Kumar and Dr. S. Soma Sundaram.
The video workshop mainly covered the engineering failures such as, aircraft engine, aircraft wings, automobile components, marine components etc,. In addition, various testing (fatigue, tensile, vibration and crash) of mechanical components were also demonstrated using videos.
In the afternoon session hands on session was conducted to develop innovative bridge model with simple things (ice cream sticks and fevicol) available. The students were divided into four team to develop their innovative model. They actively participated in the bridge construction activity and exhibited their best innovation.

Organisers

Dr. S. Suresh Kumar

Dr. S. Soma Sundaram

Student write up

T.S Murali, 3rd Year Mechanical Engineering writes…

An update of my activities:

i. Co-authored with Dr. S Sophia, Assistant Professor, Department of Mathematics and published a paper titled “Transient Analysis of an Infinite Server Queue with Catastrophes and Server Failures” in the International Journal of Pure and Applied Mathematics. (April)

ii. I am one of the recipients of the Udacity Google Scholarship Program in the Drive that was recently conducted by Google. I have been chosen for android app development category where I get three months basic course free of cost and then If I perform well here, I will be again given scholarship for the 6-month nano degree program offered by Google itself on Udacity.

I reasoned out saying that I needed these classes to help make sure I am able to develop products and take them a step further by bringing them to current definitions of "user-friendliness" which is accessible on a phone. (February)

Link for program: https://thenextweb.com/google/2017/09/05/google-udacity-android-scholarship/

iii. I attended Mechanica, The Symposium of the Mechanical Engineering Dept of IIT Madras for a talk conducted by Dr. T.G.K. Murty. (March 12-15th)

Short Description - He is a Gold Medalist both at the graduate and postgraduate levels and holds a Ph.D. in Applied Physics from the University Of Adelaide, Australia. He has 42 years of experience working for the Indian Space Research Organization (ISRO) and is currently working as the Scientific Adviser to the ARCI- International Centre for Powder Metallurgy and Material Science of the Govt. of India. He described working with optics which seemed to be his area of focus and how he and his team revolutionized few key technologies that were in the need of the hour as the United States wouldn't share it with them. His talk was themed around the 5M concept which stood for Manpower, Materials, Machines, Methods, and Money. He spoke on how these 5Ms came together to make ISRO a great success. He spoke briefly on Lean manufacturing. Lean Manufacturing is a shift away from the traditional model of batch processing. Lean Manufacturing focuses on the process as a whole of machining a single part. In this way, steps flow continuously allowing for the manufacture of a single part or thousands in rapid procession. His end remarks to youngsters like us were twofold:

1. We have the answers within ourselves

2. We should stand for India and make our country proud

iv. I volunteered and attended the National Conference on Processing and Fabrication of Advanced materials conducted by Dr. P. Rajesh, Dept of Physics. There were numerous speakers talking on the topic of Nanotechnology and nanosensors. Some were talking about nanocrystals and how they were able to harness high potentials from them. Many of them spoke about nano graphites and also fractals and how they grow and form. The talks were amazing and eye-opening as to the kind of research going on in Tamil Nadu in the field of materials. (March 1st,2nd)
Link: http://www.ncpfam2018.com/index.html

Student write up

Valedictory Function Report
By Sowmya Kumar Mechanical 3rd year

The valedictory function for the Department of Mechanical Engineering was held on April 3, 2018. The function was declared 'open' by Head of the Department, Dr V.E Annamalai. In his speech, Dr Annamalai stated the importance of punctuality, discipline and professionalism, and how being late tantamount to losing money in a workshop/corporate ecosystem.

After the inaugural address, the representatives of various student bodies- Placement Cell, EDC, ELC, Aero Club, Saaral Mandram- delineated their achievements and passed on the responsibility to the junior batches. After this session, the outgoing President, Mr Akshay Aravindan, and his core committee team, shared their experiences about conducting the technical symposium of SSN during the academic year 2017-18, Invente 2.0.

Subsequently, the new core committee members took charge. Mr Yashaswin Harathi will be serving as the President of the Department of Mechanical Engineering for the year 2018-19. The batch of 2018 exhorted the batch of 2019 to leave no stone unturned in delivering their duties to the department.

Moving on, the award ceremony was initiated by Mr Vimal Sam Singh. Here, students were given awards for their excellence in extracurricular activities, achievements in sporting events and exceptional work done for Invente 2.0.

The valedictory function reminded the batch of 2019 that their days in college were one of the most memorable days of their life and the days ahead are beginning of the most purposeful days in their life.

Student write up

College Day

By Akshay Aravindan Mechanical 4th year

On 4th April 2018, SSN Institutions celebrated its 22nd college day at Justice Prathap Singh Auditorium at 2pm. The chief guest who presided over the programme was Mr. Srinivasan Damodaram, Vice president, BFS, Cognizant Technological Solutions. The programme began with a welcome address by Dr. V.G. Idichandy, Mentor, Innovation and Incubation centre. This was followed by the presentation of the annual college report by our Principal Dr.S. Salivahanan. Next, the association presidents and the representatives of the Entrepreneurship Development Cell and Extra curricular activities presented their respective annual reports. The chief guest was then introduced and he gave his speech. Then the much awaited prize distribution ceremony took place, with students being honoured for their achievements in academics and extracurricular activities. The programme ended around 4.30pm with Dr. P Ramasamy, Dean, SSN Research centre, delivering the vote of thanks.

Akshay Aravindan received the Best Outgoing Student award.

Sports Day write up

By CT Alagappan Mechanical 3rd Year

The much awaited 19th Annual Sports day of the college was held on the 29th of March. The chief guest for the event was Mr.Raman Vijayan, one of the most accomplished Indian footballers. The day started off with the Inter-year football match finals between third year and second year students. It was a very close match which was eventually won by the second year students through penalty kicks.

The march-past which began at 9:15 AM included students representing all the departments and clubs like the NSS and the YRC. This was followed by the lighting of the Olympic Torch by the Sports Achievers from our college after which Ananth Devarajan of II year Mechanical took the Olympic Oath.

The chief guest finally declared the sports meet open. The Sports Secretary, Prithika Rani (EEE IV year) delivered the Welcome Address. Then Vignesh Veeraragavan (CSE IV year) introduced the chief guest. The Principal and the President gifted the chief guest with a memento and a bouquet. The chief guest addressed the students where he encouraged the students to further excel in their endeavours be they in academic or sports. The Annual Report was given by Dr. P. Balaji, Director of Physical Education.

Then prize distribution ceremony was held where the prizes were given away by the chief guest. This included prizes for inter-year events, teaching and non- teaching staff events, Zonal winners and the overall championship shield. The March-Past Cup was won by the NSS club. M.Sai Pradip, Sports Secretary delivered the Vote of Thanks. The event concluded with the National Anthem.

Student write up

Association of Mechanical Engineers

By Yashaswin Harathi, Mechanical 3rd year

The core committee members for 2018-2019 were elected through elections under the supervision of Dr. M Suresh and Dr. KL Harikrishna. The core committee consists of 8 members, 4 from each section. An open ballot system was followed and the committee members were elected.

The role of the members is supervisory and crucial to the functioning of various department activities. The main job of the members is to conduct Invente- the annual technical symposium of our college. From organizing various events, handling finances, and inviting other colleges for participation, the core committee members do it all.

Workshops, data collection and functioning of various clubs are taken care by the members. The members also voice their opinions and take suggestions from the students on how to take the department forward.

The graphic below shows the president and the core committee members for the academic year 2108-2019:

Student write up

LNTTS TECHgium Finals 2018

Report by Srivasupradha R and Deva Prashant S of 3rd year Mechanical Engineering. Their team was selected for the Final round of L& T Techgium contest held on 11-13/04/18 at L& T Tech Park, Manyata, Bangalore.

Team Members: Vashist Valsaraj, Srivarshith Viriyala, Deva Prashant, R Srivasupradha, all from 3rd year Mechanical Engineering.

TECHgium® is an open-innovation initiative by L&T Technology Services Limited. With this endeavor, they aim to provide a platform for the nation's most-talented engineering graduates to solve real-world engineering problems and also get due recognition for it. Students are given an opportunity to use their futuristic ideas to come up with creative solutions.

This year's competition was held in three stages - the Concept/Abstract Submission where the abstracts of our ideas were submitted. Our idea was selected and we advanced to the Technical Presentation round where we presented our idea extensively to a panel of judges. We were then selected for the Final round which was the Proof Of Concept Demo where we presented a working prototype of our model at the L&T office in Bangalore. The final awards ceremony was held at Vivanta by Taj, Yeshwanthpur in Bangalore.

With 9080+ student participations, 215+ Institute participations, 30 Technical challenges and 1080+ Concepts submitted, we, the students from the Mechanical Department [Batch 2015-2019] had managed to make it to the **top 53 teams** pan India to successfully demonstrate our concept on their Problem statement - **"Tamper proof technologies to prevent the reprocessing of medical devices"**.

We developed a simple wedge mechanism to tamper proof medical syringes and presented the ideas in the demonstration stall put up at the L&T office. We received immensely positive feedback and constructive suggestions from the employees of L&T and the industrialists who visited. They offered us different perspectives and we ended up picking at their brains to improve our product. The judges, all eminent industrialists and academicians, gave us suggestions and encouraged our idea and overall it was a big learning experience for us.

Although we didn't win, we were recognized as INNOVATORS and were awarded the certificates for the same. We have already started working towards betterment in our approaches to taking on the challenge statements and solutions and we are determined to win it next year.

Student write up

Narmadha B, 4th year Mech writes..

NASA Human Exploration Rover Challenge

The **NASA Human Exploration Rover Challenge**, prior to 2014 referred to as the **Great Moonbuggy Race**, is an annual competition for high school and college students to design, build, and race human-powered, collapsible(into 5*5*5 feet volume) vehicles over simulated lunar/Martian terrain.The rover is a three or four wheeled human powered vehicle. The intent of the competition is to pilot the rover on a simulated mars surface, which consists of about fifteen obstacles. This race course must be completed in the minimum time possible and the team that takes the shortest span of time to complete the course will be declared the winner. The rover will be powered by two of the team members- a male and a female. The wheels of the rover must be **non-pneumatic**, and this must also be a product of the team. Also, a camera will be installed in the rover and live feed from the race will be transmitted to an observatory station. The transmission must be wireless. There is another challenge for sample collection and retrieval. Our team was one of the 4 teams representing the country at NASA Rover Challenge 2018. Students from SSN were a part of Team Spacekidz India which participated this year.

"Our first day of racing began at 7am on Friday, April 13th. We had tested our tasks and systems for sample collection & solar cell deployment the night before, and now the rover was assembled, our riders were stretching, and everything looked promising.
The rover fit successfully into a 5x5 cube, could be assembled and have riders in riding position within 27 seconds, and weighed in at just over 286lbs.
Right off the starting block, the pedal broke off. Our team pulled it off the course, and determining the pedals couldn't be fixed at that moment, pushed it across the finish line together. Unfortunately, we did not finish the course under the 7 minute time limit, so we did not accumulate any score, and therefore didn't qualify for any placement in the leader board or the award categories.
For the rest of the day, we worked on repairing, finding new steel hardware to replace the piece that broke, and getting ready to take on the course again on Saturday. We were almost ready to be rideable again when the Marshall Spaceflight Center officials announced that the second day of racing was cancelled due to inclement weather, leaving us with no score and no chance to redeem ourselves.
This came as a great disappointment to us, naturally, but in the tradition of the team, our rover attracted everyone's eyes in the competition like we do in every single competition. We were appreciated as one of the best rookie teams. A presentation was given at the international evening where teams from all over the world collaborating and sharing their experience building rovers.

Our wheels were appreciated to be unique and as never seen before. Comments from judges include:
"Unique, Never seen one like that before !"
"That is good engineering!"

Unfortunately, we could not participate in any of the award categories as we couldn't complete the race in 7 minutes. Even bad luck was the race that got cancelled on second day due to bad weather, which cancelled our second chance of racing too.

The Wheel judge sent us a personal note of appreciation for our wheels! Image attached below:

Wheel technology Challenge - Human Exploration Rover Challenge Inbox x

tom.hancock@knology.net Apr 21 (8 days ago)

to Amy, me

Narmadha,

Thank you for taking part in the Human Exploration Rover Challenge and specifically the Wheel Technology Challenge. I was very impressed with the work of your team, the execution of the design and the thought that went into creating your wheels. You should be proud.

This years winning team developed a wheel that was divided into 8 equal segments. Each segment was 3D printed with carbon fiber and Kevlar. The segments had slots and tabs to connect with each other. Each segment was attached to a single cut flat spoke, that is connected to the wheel hub. This design has real world applications for future human space exploration as it would allow for a fast, light weight and safe way to repair a wheel on Mars, the Moon or other space body. This design also performed extremely well during the race. We considered it ground breaking engineering and a departure from how NASA has been working with wire or formed mesh wheels the past several years.

I received permission to share the wheel report with you. Please find it attached.
If I can answer any questions please let me know.

Again, well done, please come back next year and keep reaching for the stars.

Cheers,

Tom Hancock
Lead Judge, Wheel Technology Challenge

Team Members:

- Arjith Natarajan -Tools Maker
- Arunkumar R- CAD Modeler
- Prasanna Murugaiyan - Fabricator
- Prathap Seelan G P-Designer, Pilot
- Nimrah Qureshi -Team Manager
- A.Uma-Telemetry Builder
- Nethaji P R - Fabricator
- Narmadha Balraj -Team leader, Designer, Fabricator, Pilot

Our teamwork and creative efforts were much appreciated by the NASA people. The NASA officials didn't get to see us race on the second day, but they felt that we would have had a very good shot if we had, and so did we.

In conclusion, we are still a bit sad at the results of this year's race, but we're turning that into motivation to bounce back next year with something better than ever. We thank our family members who were supporting us throughout this journey and prayed for our victory. We thank Dr. Srimathy Kesan ,CEO of Space Kidz India who trusted our abilities as engineers and having us in her team. And we thank all the professors from the department who made this possible by mentoring and supporting us!"

-Team Leader, Narmadha B

Mech Marvel - 41

Indian Railways inducts New Machine 09-3x Dynamic Tamping Express for improved Mechanized Track Maintenance

Indian Railway has inducted three numbers of 09-3X Dynamic Tamping Express machines, the state of the art integrated track maintenance. These machines were inaugurated and flagged off by Shri M.K. Gupta, Member Engineering, Railway Board at Faridabad. Seven number of such machines are planned to be included within next six months in the present fleet of 874 track maintenance machines over IR for deployment on heavy density Routes.

A tamping machine or ballast tamper is a machine used to pack (or tamp) the track ballast under railway tracks to make the tracks more durable. It is a device used to compact or flatten an aggregate or another powdered or granular material, typically to make it resistant to further compression or simply to increase its density.

The New 09-3X- Dynamic Tamping Express costing about ₹ 27Cr each is a latest high output integrated tamping machine having multiple functions, so far being carried out by different machines. It can measure pre & post track geometry, correct the track to required geometry, can tamp three sleepers simultaneously, stabilize and measure post tamping track parameters under load to ensure quality of work done. This eliminates the need for a separate stabilisation machine which reduces operating costs and track possession time. This machine will vibrate & compact the loose stone ballast after tamping for safe movements of trains. These machines have been manufactured in India under MAKE IN INDIA initiative with imported components. 42 more such machines have been planned to be included in Indian Railway maintenance fleet over next three years. This will further improve the safety, reliability and economy in maintenance of tracks over Indian Railways. This will also eliminate manual measurement of track quality after maintenance.

Three operations including manual interface is now combined in one machine.

Tamper + Stabilizer + Post Tamping Parameters = 09-3XDynamic

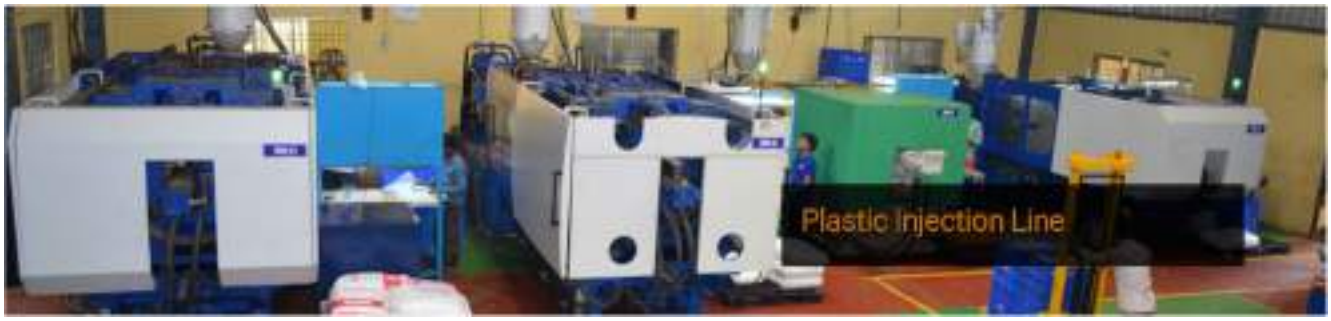
For practical hands-on training to operate such advanced track maintenance machines a new 3D state-of-the-art tamping simulator has been installed and commissioned at Indian Railway Track Machine Training Centre Allahabad (IRTMTC) recently. India Railway has planned complete mechanisation of inspection, monitoring, relaying and maintenance of track by 2024. **This type of advanced technology simulator is presently available only in five countries including India.**

[Source: Railwaygazette.com]

Chennai CNC Servotronics Pvt Ltd.

Chennai CNC Servotronics (P) Ltd. are Commercial Tool Rooms engaged in Tool & Die Manufacturing like Press Tools, Plastics moulds and Die casting Dies. Also do job work on CNC Wire EDM, CNC Milling and CNC Sparking.

- Chennai CNC is committed to achieve the Total Customer Satisfaction through Understanding & fulfilling the customer requirements, Continual Improvements in all process, Involvement of all employees in every activities and Maintaining safe & Green work place environment
- State of the art CAD/CAM facilities for design & CMM facilities for inspection.
- Chennai CNC Servotronics Pvt. Ltd. has four units – Unit I (Guindy), Unit II (Ambattur), Unit III (Thirumazhisai) & Unit IV (Pillaipakkam).
- Unit I (Tool Design & Manufacture – HO); Unit II (Tooling); Unit III (Plastic Parts) ; Unit IV (Stamp & Weld Parts).
- Having a tie up with a company from Taiwan, for making Casting Tools. The pattern & casting poring is done at Taiwan. The machining & tool proving is done at the factory.



- State of the art CAD CAM division with latest softwares like SOLID WORKS, CIMATRON, MASTER CAM UG & CATIA etc. to execute every assignment properly with Technical support wherever required.

- They have been offering services to many of the leading industries like Automotive (both commercial & passenger vehicles), SSI units, Electrical companies, Consumer Products, etc.. They also export toolings and parts to SPAIN & USA.

Chennai CNC is hiring on a regular basis to cater to its customers requirements.

If you are interested, post your updated resumes to *chennaicnc@gmail.com*

Fill up the form if you need any details. http://chennaicnc.com/?page_id=2761

Amazing Innovation- 65

Sweden's new electric highway works like a scaled-up slot car track

The Swedish Transport Administration has just opened a 2-km (1.2-mi) stretch of electrified road that works like slot cars. The project, dubbed eRoadArlanda, involves embedding electric rails into the road surface to power electric vehicles through a contact arm hanging down from under the car.

In the eRoadArlanda project, electricity from two parallel tracks in the road is fed into a vehicle through an arm attached to the underside of the car. That might sound restrictive, but the arm is retractable, and hooked up to sensors that tell it to only extend down when it's above the rails. If the car needs to overtake or turn off the road, the arm folds back up out of the way and the vehicle draws power from its battery.

Rain reportedly won't pose a problem either. Drainage systems are in place along the track, and the contact arm has been designed to push water out of the way – as well as gravel, rocks and other small obstacles. The gap between the rails is also too small to cause a problem for motorbike and bicycle wheels.

Source: eRoadArlanda

Amazing Innovation- 66

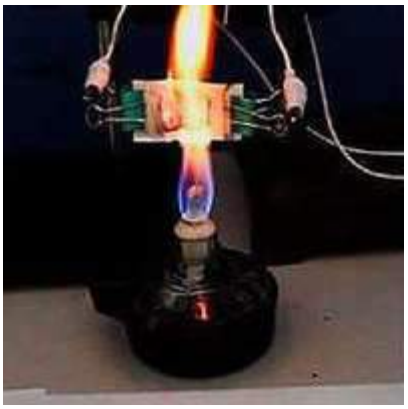
Recycled wood waste makes concrete stronger and more watertight

A team of researchers from the National University of Singapore (NUS) has developed a novel new method to recycle wood waste by incorporating it into cement and mortar mixtures, making the resulting materials both stronger and more watertight. "Close to 50 kilograms (110 lb) of wood waste can be utilized for every tonne of concrete fabricated," explains Kua Harn Wei, a researcher on the project. As well as improving the strength of concrete structures, and recycling wood waste that would otherwise be incinerated or put in a landfill, the method is a unique way of storing carbon in buildings. Incorporating biochar into concrete construction allows the carbon to be locked into a structure instead of being released into our atmosphere either through incineration or decay.

Source: National University of Singapore

Amazing Innovation- 67

Fire Alarm Wallpaper



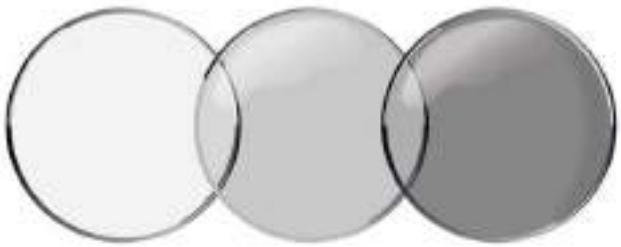
An innovative fire alarm wallpaper can sound an alert in the presence of fire, and help keep the fire from spreading.

The wallpaper, created by teams from Shanghai Institute of Ceramics and the Chinese Academy of Sciences, is made up of graphene oxide and hydroxyapatite nanowires, both of which are fire-resistant. In addition to helping prevent a fire from spreading, the graphene oxide sensors in the wallpaper will conduct electricity when heated, triggering an alarm within two seconds if extreme heat is detected.

Link: https://youtu.be/pGPDtSYbCZc

Amazing Innovation- 68

Self-tinting contact lenses are on their way



Over the years, we've gotten pretty used to glasses with photochromic lenses, which automatically darken when exposed to bright light. This Wednesday, however, Johnson & Johnson Vision announced the upcoming availability of its self-tinting contact lenses.They'll still correct vision problems just like normal prescription contacts, but will also "quickly and seamlessly adjust from clear to dark in response to changing light conditions," filtering blue light and blocking UV rays.

Source: Johnson & Johnson Vision

From a mail to VeA..

Irfan Husain, BE Mechanical Engineering batch 2010-2014.

I hope this mail finds you well. A lot has happened in my life since the last time you heard from me.

On the April of 2017 I cleared the Service Selection Board (SSB) interview to serve in the Indian Armed Forces. The reason why I joined the Armed forces is that I preferred an adventurous job than a routine desk job and also, I get to play my tennis like always as the armed forces take sports seriously. Till now it has all worked out very well.

On 24 June 2017 I joined the Indian Naval academy to start my training. The Indian Naval Academy is the largest officers training academy in Asia. I was a direct recruit so I was commissioned straight away as an assistant commandant. The training in the academy was extrem ely tough. We were taught survival skills in the most extreme situations. We learnt how to lead men and give the appropriate orders in crunch situations. I also realized that this job is one of the ultimate leadership job one can possibly ever have. Our job was to lead men to accomplish the task given to us.

On 22 November 2018 I passed out of the Indian naval academy. I got back to playing tournaments as usual before I had to join my first unit in the southern naval command in cochin. I served onboard INS Shardul, an amphibious warfare vessel, briefly. I then moved on to ICGS Sarathi, an offshore patrol vessel belonging to the Indian coast guard. I've done patrols on the west coast of India from Sir creek (India Pakistan border) to the lakshadweep, the east coast of India and I've also been given the opportunity to be a part of the overseas deployment of the Indian navy to places like Maldives, Mauritius, Tanzania, Seychelles, Réunion Island and Zanzibar.

My job includes checking all vessels that enter the Indian waters for any illegal activities, to carry out rescue operations among many others. Many times we are required to jump off the ship into the ocean without thinking twice or jump off a helicopter to save a life. There is constant adrenaline rush here.

When I return to my base I train for tennis and play my tournaments whenever I can. It's not an easy life but it's very satisfying.

Anyway, I just wanted to update you about what's going on here with me. I wish would be able to write to you soon. My regards to everyone in the department. I miss my college days at SSN a lot. It was a beautiful period in my life and I have such fond memories of SSN.

Warm Regards,

Irfan Husain

Alumni update 2…

From a mail to VeA..

Raaghav Thiagarajan, **BE Mechanical Engineering batch 2009-2013**

I have successfully completed my masters degree - M.B.A (Marketing). I will also be joining Godrej Consumer Products Limited as an Area Sales Manager in June. I just wanted to share the moment with you along with a few other snippets.

The last two years have been the ultimate learning experience in my entire life. In terms of meeting people, exploring new places, learning new subjects and getting to work with some amazing people.

I received a special mention award for **"Contribution to building the institute"** during the commencement ceremony. To mine and everyone's surprise, I have emerged as the second highest scorer in the Marketing department and one among the top 5 in college.

I also got an opportunity to conduct a workshop for around **600 students, staff and professors** in **Microsoft Excel**. It would be lovely to conduct the same to our department juniors too, depending on their interest levels and your convenience.

Like I had mentioned to you before, I attended Winter School in Berlin, at the Berlin School of Economics and Law. The trip to Europe was really lovely. I got to visit Brussels, Bruges, Paris, Berlin, Rome and Prague. I experienced snowfall for the first time and it was a superb feeling!

All these said, I want to wholeheartedly thank you for being an amazing mentor and consider myself fortunate that it happened at an early stage in life. I owe this little success or progress of mine to you :)

Alumni Info 3

Suggestions from alumni…

From a mail to VeA…

Tarun Subramanian, **BE Mechanical Engineering batch 2013-2017**

This is in continuation of Tarun's suggestion in last months aspire that students should start their LinkedIn profile as soon as they join final year so that they can build their network quite well before they actually leave the college.

A quick note about the presentation:

This presentation mainly focuses on not only how to build your LinkedIn profile but also on how to grow your network. I have included a few slides which show the basic outline on how to write/present your profile in LinkedIn but the majority of slides focus on how you connect with people, get recommendations, get a customised LinkedIn profile link etc.

LinkedIn Overview:

- LinkedIn is the largest professional networking site (460+ million members)
- Establish a professional presence online
- Build your network (classmates; alumni; past and present co-workers; supervisors)
- Find and explore opportunities (companies, jobs, internships)
- Participate in professional groups

Given below is a link for the presentation:
How to build your LinkedIn Profile:
https://drive.google.com/file/d/1KLCUmKdpzVsXVlC9rKhr2Iz5d3glhp5M/view?usp=sharing

Also, I will be happy to answer any questions you may have.

Tarun Subramanian
tarun13103@mech.ssn.edu.in

Sign up on LinkedIn: https://www.linkedin.com/

May 2018

- **CII Chennai Zone** Manufacturing panel is organising the Webinar on "Electric Vehicle Technology" scheduled on **2 May 2018 (Wednesday)** between 1500-1630 Hrs.
  The Webinar aims to cover the following :
  - Need for Electric Vehicle (EV)
  - Indian Government direction
  - Technology / Options
  - Cost benefit

  Speaker Profiles
  Mr Kiran Kumar AV, Head – Engine Axles, Ashok Leyland Ltd - Mechanical Engineer and MBA
  Mr Sriram T, Lead – Business Development & Solutions Design for EVs, Ashok Leyland Ltd
  Delegate Fee *(including GST):
  CII Member: Rs.1000/- per login & Non Member: Rs. 1250/- per login
  Contact: R Kannan at 9940492204 r.kannan@cii.in

- **Department of Chemical Engineering, SSNCE** are organizing a DRDO (NRB) sponsored workshop on **18th May** on developing Li-ion Batteries for Naval applications.
  The workshop will cover:
  - Fundamentals of Li- Ion Batteries
  - Fabrication Methodology and Electrochemical characterisation of Li-ion Batteries.

  The seats are based on first come first serve. **Registration closes on 7th May.**
  Contact: Dr.Siluvai Michael

- **Tribology Society of India** has announced the 10th in the series of Summer School on Tribology to be held from **18th-22nd June 2018** at IndianOil Institute of Petroleum Management, in Gurgaon. This is a residential programme in which various aspects of the multidisciplinary subject of Tribology are covered in detail by various eminent Tribologists from across the country in lectures. **Entry is restricted to Faculty and Scholars only**. Last date to submit application is **2nd May**

  For information: http://www.tribologyindia.org/pdf/10th-summer-school-on-tribology-sst-brochure.pdf .

June 2018

- Computational materials science group of Department of Physics of **Sathyabama Institute of Science and Technology**, Chennai is organising a Summer Workshop on “Modelling and Simulation in Materials Science and Engineering” with Hands on Session (MSME-2018) **18-22 June, 2018**
  TOPICS OF THE WORKSHOP:
  - Introduction to density functional theory
  - Concepts of DFT codes for band structure calculations
  - Structure optimization, building models with supercells, DFT+U
  - Electronic, magnetic, optical, thermo electric, mechanical properties of various materials
  - Use of the web-based graphical user interface (w2web) as well as the command-line interface
  - "Hands-on" calculations with the WIEN2k /VASP code
  - Discussions and exchange of experience between users.

  Interested participants are requested to send the filled-in registration form and DD on or before **31-05-2018** to **Email ID**: wspmsme2018@gmail.com.

Conferences

August 2018

- Second Edition of "International Conference on Advances in Materials and Manufacturing Applications (IConAMMA)" to be held from **16th – 18th AUGUST 2018** at Amrita School of Engineering, **Amrita Vishwa Vidyapeetham**, Bengaluru Campus, Karnataka, India.

  31st May, 2018 - Submission of full papers.
  Conference Website: http://web-blr.amrita.edu/IConAMMA/index.html

- Department of Physics, **Periyar University**, Salem, is organizing the 2nd International Conference on Recent Trends in Applied Science and Technology (ICRTAST-2018), during 23-25 August 2018.

  Abstracts must be submitted by **21.06.2018**

Challenges/Contests

May 2018

- The **Altair Enlighten Award** is intended to honor the greatest achievements in vehicle weight savings each year. It inspires interest from industry, engineering, policymakers, educators, students and the public, creates further competition for new ideas in the industry, and provides an incentive to share technological advances.

  Participants can choose to enter from a variety of categories. The 2018 Altair Enlighten Award will be presented at the CAR Management Briefing Seminars, Traverse City, Michigan, US on July 30th, 2018. Exciting cash prizes to be won.
  Entries close on **25th May**
  Contact: http://altairenlighten.com/award/#enter

- The India Innovation Growth Programme (IIGP) 2.0 is a unique tripartite initiative of the Department of Science and Technology (DST), Government of India, Lockheed Martin and Tata Trusts.

  Supporting the Government of India's missions of "Start-up India" and "Make in India", IIGP 2.0 enhances the Indian innovation ecosystem by enabling innovators and entrepreneurs through the stages of ideation, innovation and acceleration, to develop technology-based solutions for tomorrow.

  One can choose to enter the Open Challenge or the University Challenge.

  Contest Website: http://www.indiainnovates.in/
  Last Date **18th May**

July 2018

- **Tech Brief** presents "Create The Future Design Contest 2018"
  Submission deadline - July 2, 2018

  Choose one of seven categories for your entry:

  - Aerospace & Defense -- Product innovations with applications in the aerospace, aviation, and/or defense markets.
  - Automotive/Transportation -- Products that enable movement of people and goods from one place to another.
  - Consumer Products -- Products that increase quality of life in the workplace, at home, during leisure time, or while traveling.
  - Electronics/Sensors/IoT -- Products that improve computing, communications, sensing, test, and other fields that rely on advances in electronic components, boards and systems; products that enable an interconnected world – the Internet of Things (IoT).
  - Robotics/Automation/Manufacturing -- Products that speed, improve, and/or automate work, manufacturing, and research & development (R&D).
  - Medical -- Products that improve the efficiency and quality of healthcare.
  - Sustainable Technologies -- Products that reduce dependence on non-renewable energy resources, as well as products designed for other purposes using environmentally friendly materials or manufacturing processes.

  Provide a description of your entry (up to 500 words) in the form of a technical abstract, in English. Your description should cover how the entry works, what makes it novel, how it would be produced, and where it would be applied. Contest Website: https://contest.techbriefs.com/

Founder of World Wide Web visiting SSN

- **Sir Timothy Burners-Lee** the founder of World Wide Web will be visiting SSN on the 18th of May, 2018. He will be delivering a talk at our Main Auditorium. He is currently a professor of Computer Science at Oxford University and implemented the first successful communication between hypertext transfer protocol (http) server and client in year 1989. He is the director of the Worldwide Web Consortium (W3C) which oversees the continued development of the web. He is also the founding chair at the MIT Computer Science and Artificial Intelligence Laboratory (CSAIL).

  Click here for Registration : https://goo.gl/forms/uJj05kWj6PGjgVOD2

  Time: 9.30 Am to 12.30 Pm

  Venue: Justice Pratap Singh Auditorium, SSN Institutions, OMR, Kalavakkam, Off Chennai, 603110

  For any queries contact: Mr. Arun Prakash: 9003762330/ tblee@ssn.edu.in

Dr.Muthu Senthil Pandian
SSNResearch Centre

1.DST, Call for proposal under State Science & Technology Programme (SSTP)

Prominent areas on which project proposal can be formulated:

a) **S&T Studies & Surveys:** This includes support for carrying out S&T studies surveys including techno-economic analysis, simulation modelling and studies etc; and development of State S&T database, S&T resources; State S&T policy issues; specific status reports etc: The activities under this head should lead to specific action plan for project generation.

b) **Location specific research & technology development:** Support for identifying/ projectising S&T programmes and for development-oriented location specific research and technology development.

c) **Pilot scale demonstration projects:** Pilot scale demonstration projects including field trials etc based on technologies developed by Central S&T Agencies/ Labs/ Institutions etc. relevant to the State needs.

d) **Replication of success models:** Replication of successful projects/programmes in other interested States based on successful experiences of a State S&T Council/ State S&T Institute/ NGOs etc.

Eligibility:

The SSTP Programme supports projects submitted by individual principal investigator (PI) and considers based on competitive grant mechanism. The PI should be faculties/ scientists working in regular position in recognized academic institutions, public funded R&D Institution/ Laboratories, state S&T councils in partnership with other academic/ R&D organisation, State line departments, S&T based voluntary organisation etc. The age of the PI should not be more than 62 years in case of University/Academic Institutions and not more than 55 years in case of the Non-Governmental Organizations and Central and State Laboratories on the date of project submission to this Department.

Proposal Submission:

Please submit the proposal online at http://onlinedst.gov.in/Login.aspx and also send 2 hard copies of complete project proposal in prescribed format with all enclosures (1 marked original+ 2 hard copies + 1 soft copy as .doc and .pdf file) in prescribed format (as provided on DST website) in Pen Drive/CD in an envelope marked “Call for Science & Technology Proposals on “State Science & Technology Proposal (SSTP) -2018-19/PI Name)” addresses to: from Er. Ravinder Gaur, Scientist 'D' & Member Secretary (SSTP), Technology Development & Transfer Division, Room No. 13, Hall-A, S&T Block-II, Department of Science & Technology (DST), Technology Bhavan, New Mehrauli Road, New Delhi- 110016 by the closing date of the call. Soft copy is also to be emailed to rgaur@nic.in & sstp-most@gov.in. The proposal should be received in DST online and offline on or before 31st May, 2018.

Duration:

3 years’ maximum

Project Costs (Indicative):

Commensurate with the objectives of the proposal

Deadline **31st May, 2018**.

For more details: http://www.dst.gov.in/sites/default/files/Adv..pdf ; http://www.dst.gov.in/

2. Call for innovation proposals

University Challenge

Ideation and incubation of concepts (both industrial and social) sourced from universities across India. Out of the applications received, up to 30 top teams are down-selected as Phase A finalists.

Eligibility:

Applications will be sought from individual students/teams across for-profit & non-profit educational institutions/universities in India.

The University Challenge will cater to ideation and incubation of concepts (both social and industrial), with the following benefits for the participating teams:

Focused Areas: http://www.indiainnovates.in/UniversityChallenge.aspx

Open Innovation Challenge

Innovation of concepts (both industrial and social) sourced from the technology community at large in India and not specifically from the academic arena. Out of the applications received, up to 50 top teams are down-selected as Phase B finalists.

Eligibility:

Applications will be sourced from the technology community at large and not limited to the academic arena, unlike the University Challenge. This would include:

- Private Individuals
- Local Private Entities
- Government Entities
- Consortia of the above
- Any group of people or organisations

Focused Areas: http://www.indiainnovates.in/OpenChallenge.aspx

Last date of application submission: **18th May 2018**

Website: http://www.indiainnovates.in/ ; https://apply.indiainnovates.in/

Inspiring Life Stories

Mr. Kishore Babu
Schwing Stetter

When I started using pen in my primary school, and I made a mistake, I would try hard to erase it before submitting to my teacher.

Sometimes, I use chalk to clean my mistake but it later re-appeared.

So I began to use saliva, it worked, but only to leave holes in my books.

My teachers then used to beat me for being outrageously dirty. But all I tried to do was to cover my error.

One day, a kind hearted teacher who loved me so much called me aside and he said, " Anytime you make a mistake, just cross it and move on".

He said further " Trying to erase your mistakes would only damage your book to nothing."

I told him in protest that I don't want people to see my mistake.

My loving teacher laughed and said " Trying to erase your mistake will make more people know about your mess and the stigma is for life".

Moral of the conversation: we all make some mistakes in life. Just cross them over and move on. Don't expose yourself as a result of trying to cover your mistakes.

Better things are ahead of you. Strike out your 2017 mistakes and move into 2018 with a fresh note.

Contribution: Ms. B. Niranjana, Sr. Associate, Visteon Automotive India Pvt. Ltd.

Thanks & Regards –

Kishore Babu

HR - Department

SCHWING Stetter India Private Limited

Corporate Wisdom 53

The quality of painting is entirely the responsibility of the Painter – in spite of the canvass, despite the paints and irrespective of the brushes. Similarly, the quality of the sculpture is the responsibility of the sculptor. Similarly, the quality of your life is your responsibility. I do not think you can blame anyone.
One of the guiding principles of life that can make all the difference is:

"I will assume unconditional responsibility"

I will assume- Normally we wait for others to offer responsibilities. We have choices whether we want to be inactive, reactive, proactive or interactive in taking the responsibilities. A person who takes initiative, volunteer, steps forward becomes a proactive or an interactive person. Put your hand up and announce your presence.

I will assume unconditionally- What is not unconditional never gets done. Burn the bridges, Conditions are required only to pass on the blame, in case of failure. Don't ever process failure as an option. Where conditions succeed, responsibilities fail. Where responsibilities succeed, conditions are redundant. Be unconditional.

I will assume unconditional responsibility: What is perceived as difficulty or "**Kashtam**" will only appear as a burden. What is perceived as "**Ishtam**" will bring joy and happiness. So, don't look at responsibilities as "Kashtam" instead see them as "Ishtam". Switch the mind to see these as opportunities. Only when you feel a complete sense of responsibility for your life, you can respond with ability.

So unconditionally put your hands up and be counted. Allow the leader within you to emerge, evolve and grow.

#WishingMostAndMore

Have a wonderful day & a great week!

R.Ramakrishnan
--

This issue has 2 annexures-
Anx 1. Create the Future Design Contest
Anx 2. DefExpo 2018

Edited by Nitin Joy, with editorial support from Srivasupradha R, Sowmya K and CT.Alagappan

The purpose of adding an Annexure
is to enable forwarding specific content
to persons who may be interested
without the need to send the whole Newsletter
----------VeA


Srivasupradha R


Sowmya K


CT Alagappan