Newsletter

Volume 7, Issue 10, October 2017

Mechanical Aspire

Achievements in Sports, Projects, Industry, Research and Education

All About Nobel Prize- Part 46

Predictions for 2017

It is time for identifying the next set of Laureates. Keep a watch..

Announcements of the 2017 Nobel Prizes

Physiology or Medicine: Monday 2 October, 11:30 a.m. at the earliest

Physics: Tuesday 3 October, 11:45 a.m. at the earliest

Chemistry: Wednesday 4 October, 11:45 a.m. at the earliest

Peace: Friday 6 October, 11:00 a.m.

The Sveriges Riksbank

Prize in Economic Sciences

in Memory of Alfred Nobel: Monday 9 October, 11:45 a.m. at the earliest

Literature: The date will be set later

Times listed are local time in Sweden.

Indian time = Sweden time + 3 and a half hrs.

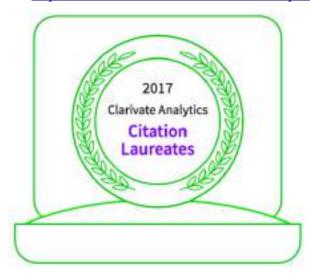
So, when it is 11.30 am in Sweden, it will be 3 pm in India.

Watch it live at https://youtu.be/ScP9ZdR2U2g

Predicting the Nobel Awardees - "Citation Laureates" by Clarivate Analytics

- Using Web of Science Data on citations, Clarivate Analytics predicts possible Laureates every year.
- Since 2002, the the *Intellectual Property & Science business* has released its yearly additions to the elite roster of Citation Laureates researchers whose advances have earned quantifiable esteem and wielded unusually strong influence in the scientific community.
- The search for a new class of Citation Laureates begins with the Web of ScienceTM and its store of publication and citation data. The analysis primarily centers on individuals who have registered a high number of citations thanks to work demonstrably associated with a consequential discovery or advance (or, in some cases, more than one such achievement).
- For more on the selection process, read the complete essay on methodology.

- For 2017, the predictions can be seen at https://clarivate.com/2017-citation-laureates/
- Since the inception of the Citation Laureates in 2002, their analysis has identified 43 eminent scientists who went on to win the Nobel Prize. See the full list of correct predictions to date, at http://stateofinnovation.com/successful-predictions



As is customary, three selections for possible prizes and winners have been made in each of the following Nobel categories: Physiology or Medicine, Physics, Chemistry, and Economics.

(KSHV/HHV8).

Physiology or Medicine

Physiology or Medicine		
Lewis C. Cantley	Meyer Director of the Sandra and Edward Meyer Cancer Center and Professor of Cancer Biology in Medicine, Weill Cornell Medicine, New York, NY, USA	For discovery of the signaling pathway phosphoinositide 3-kinase (PI3K) and elucidation of its role in tumor growth.
Karl J. Friston	Professor of Imaging Neuroscience and Wellcome Principal Research Fellow, Wellcome Trust Centre for Neuroimaging, University College London, London, UK	For fundamental contributions to the analysis of brain imaging data, specifically through statistical parametric mapping and voxel-based morphometry.
Yuan Chang	American Cancer Society Research Professor, Distinguished Professor of Pathology, and UPMC Endowed Chair in Cancer Virology, University of Pittsburgh School of Medicine, Pittsburgh, PA, USA Director of the Cancer Virology Program, University of Pittsburgh Cancer Institute, American Cancer Society Research Professor, Distinguished Professor of	For their discovery of the Kaposiūs sarcoma-associated herpes virus, or human herpesvirus 8

Patrick
S. Moore

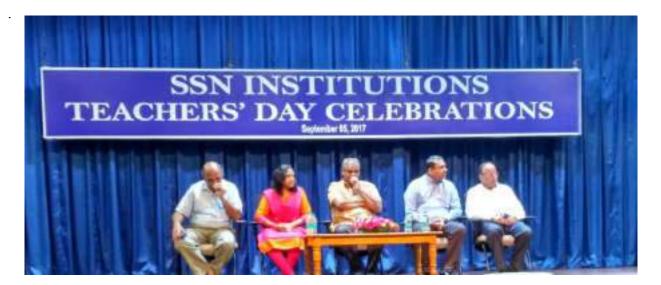
Of Pittsburgh Cancer Institute, American Cancer
Society Research Professor, Distinguished Professor of
Microbiology and Molecular Genetics and the
Pittsburgh Foundation Chair in Innovative Cancer

Pittsburgh Foundation Chair in Innovative Cancer Research, University of Pittsburgh School of Medicine,

Pittsburgh, PA, USA

TABLE 1: 2017 Clarivate Analytics Citation Laureates in Physiology or Medicine

Check it out on Oct 3rd, 3 pm and see for yourself how accurate this prediction is.



Prof. R Raman, of Nandanam Arts College for Men, addressed the gathering and highlighted the essentials of Teacher Student relationship with plenty of humorous anecdotes. Some highlights.....

- It is a special day for me because I got this opportunity to talk before meritorious students and highly learned faculty of SSN. Such a learned audience is a boon for any speaker. we come here to learn something from you.
- Socrates said,"I don't know anything. That is the only thing I know very well". Those who think "I don't know" tend to learn more.
- Anything must first start with us. Socrates said, "An unexamined life is not worth living". Everyone must think "how can I bring pride to this Institution?". A good teacher emerges when good questions arise. The digital age student may be in a different mindset. It is important for us, (teachers) to connect the reality with what is in books.
- Many would have slept on the beaches of Rameswaram- everyone did not turn out to be a Kalam. Mere opportunities are not enough. You need the drive in you.
- There is no connect between achievements and age. Shelly died at 30 years. Keats died at 26 years. The period between the ages of 17 and 40 is real life. In this period, never invoke disbelief. Nothing stops our growth, if only we have faith. Learn to think differently.
- Robert Frost said, "Woods are deep and dark, Miles to go before I sleep". How late we get up, so late will be our success in life.
- Dr. Radhakrishnan said, "A life of joy and happiness is possible only on the basis of knowledge and science." "Books are the means by which we build bridges between cultures."
- · Lenin said, "Read, read and read".
- Book reading is a must. Continuously read.
- Learn to appreciate, By appreciating, we convert other's excellence into our property".
- Each one should think, "what shall we do to get name and fame".
- It is important to learn how to use the "today". All the best.





2. Farewell function for Dr.K. Kasthuri was held on Sept 6.

Madam Ms.Kala Vijayakumar: The very word "Pirivu ubachara vizha" is not good. We don't feel any pirivu (separation). It is only a farewell -because he has fared well in his work. He would take up any work and do it with utmost sincerity.





The most unexpected was the "neverseen-on-stage" figures of Mr.Ganesh Prasad (Head of Construction and Facilities) and Admin Officer Mr.Nagalingam coming on stage with their beautiful tamil poems to felicitate Dean.

Dr.Sunitha Nair and Dr.Murugesan recollected their association with Dean.



Dean was very casual in his response. He quoted a simple Tamil verse which runs like this

"Friends should be praised when they are not around. Son should be praised whole heartedly. Employees should be praised only after they finish the job."

" Maybe when I have completed my job, I am being praised." He brushed it off simply.

He also recalled how he was called in to lead SSN...

"I had a call from BITS Pilani principal to join as Principal in a private college. I said yes and forgot. I was Assoc secretary for our premises in Thiruvanmiyur and we had a case against municipality- which I was fighting in the court. The judgement came in our favour. Suddenly, two days later, I had a call from Justice Pratap Singh- I thought he is going to query on the closed case and so went with fear. But he asked whether I would be willing to join his brother's college. I agreed. I still do not know who selected me."



He was humble enough to pass on all the credit to his team "If at all I could perform so satisfactorily, it was all because of you and your co-operation."

He also suggested that staff club should be more active and there should be avenues for different dept staff to meet each other.

3. Invente was held during Sept 8 - 9, 2017.





Dr.B.Chandrasekaran, Director, CLRI, graced the occasion as Chief Guest. Prof.Chandy briefed upon what Attributes are expected of a Graduate and how such events like Invente help in achieving some of the attributes.





Dr. S. Joseph Gladwin, ASP, ECE, YRC In charge

4.Blood Donation Camp was organized by NSS and YRC units of SSN on 12 September 2017,between 10.00 am to 03.00 pm.

5.NSS day was celebrated by the NSS Unit of College on 19th September 2017, Tuesday at Mini Auditorium between 9 AM and 3.30 PM. Mr. Arun Krishnamurthy, Founder - Environmentalist Foundation of India (EFI) delivered the inaugural address. Intercollegiate competitions were organized for the NSS volunteers on social awareness themes.



Ms.P. Kaythry, AP, ECE NSS In Charge

6. The Department of Training and Placement organized a 4 day **company-specific training program** for Accenture and Infosys from September 12th (Tuesday) to September 15th (Friday). At the end of the campus placement process, **this led to a total selection of 177 students** from various branches, by these two companies.

A.S.Sriram, Sr.Mgr, Placement





7.SSN MUN (National Level Model United Nations Conference) was inaugurated on Sept 15, 2017. Ms. Ishara Davey, Second Secretary and Consul of the Australian Consulate, Chennai, was the Chief Guest . She inaugurated the MUN and delivered the inaugural address. Details in Student write up....

Dr. Sunita Nair, In Charge-Student Activities

External Recognition for SSN



Our President, Ms.Kala vijayakumar has been invited by State Council for Educational Research and Training (SCERT), to support in revising the syllabus of Tamilnadu School Curriculum.

As a first step, inaugurated by our President, several workshops for framing new syllabus by the State Council for Educational Research and Training (SCERT) were held in our campus from 20.09.2017 to 23.09.2017

In this connection the Seminar Halls of ECE, IT, CSE, BME, CHE & EEE were extended for the workshops and the mini Audi was used for the inaugural session.

SSN Civil student wins in Swach Barath Mission

Dr.Ramana Gopal, HOD of Civil Engg writes..



I am very happy to inform that Ms.C.M.Elakiya, III year Civil Engineering student under the guidance of Dr.Srinath R, Associate Professor, has won III prize in the National level competition under Swachh Bharat Mission (Gramin) for "Technological solutions for safe disposal of Menstrual waste" conducted by Ministry of Drinking Water & Sanitation, Govt.of India on 8th September 2017 at New Delhi. She has been awarded with a prize money of Rs.50,000/- and a silver plaque.

Info to Alumni- Department Update

External recognition



Dr.L.Poovazhagan has been invited as a chief guest for national level students technical symposium (mechanical engineering) organized by Annai Mira College of Engg. & Tech., Vellore on 22.09.2017. He also acted as a judge for various events held at the symposium.

Dr.L.Poovazhagan, Assoc.Prof./Mech., delivered a guest lecture at St.Joseph College of Engineering, Sriperumbudur for Mechanical Engineering students on the topic of Sheet metal processing (12-9-2017)



Dr. Satheesh Kumar Gopal presided as Guest of Honour for the Teacher's Day Celebration 2017 at Asan Memorial College of Engineering & Technology, Chengalpattu held on 09.09.2017.

Dr. Satheesh Kumar Gopal delivered a Guest Lecture on "Industrial Robotics" at Anand Institute of Higher Technology, Chennai on 21.09.2017.

Dr. G. Satheesh Kumar, Presided as Chief guest at National Conference on Robotics & Automation Engineering (NCRAE'17) on 18th August 2017 at Bharath Institute of Higher Education and Research, Chennai, India supported and organized by the Tamilnadu State Council for Science and Technology



Dr. N. Lakshmi Narasimhan, Associate Prof/Mech, reviewed a paper for Int. J. Refrigeration (Elsevier)

Dr. K. Jayakumar, Associate Professor/Dept. of Mech. Engg, reviewed a paper titled "Optimization of process parameters on machining force and MRR during End milling of GFRP composites using GRA" for the "World Journal of Engineering, Emerald Publishers, UK.





Dr. N. Nallusamy reviewed an article titled "A comparative analysis of spray combustion of Kapok seed oil and Jatropha oil as an alternative Biofuel" for the journal "Journal of Engineering Science and Technology"

Dr. N. Nallusamy, Professor, reviewed an article titled "Preparation of Co3 O4 - H2O nanofluid and application to CR-60 Concentrating Solar Collector" for the journal "Progress in Industrial Ecology"

Dr. N. Nallusamy, Professor, reviewed the article "Performance analysis of solar chimney using mathematical and experimental approach" for the Journal "International Journal of Energy Research"

Dr. K. Rajkumar, Assoc. Prof., reviewed a book on the tittle 'Development and Application of Biomedical Titanium Alloys' Bentham Science Publishers, China

Programs attended



Dr M S Alphin, Associate Professor, presented his ongoing project work in Review / Monitoring meeting for DST Project (Engineering Sciences) which was held on 23rd September, 2017 (Saturday) at IIT Madras by the Expert Committee. The Progress was declared as "Satisfactory".

Other Activities

Dr M S Alphin. Associate Professor received Recognition from SSN Management- Best faculty award (I Prize) for 2015-16 in Teachers day Celebration held on 02 Sep 2017.

Dr A.K.LakshmiNarayanan. Associate Professor received Recognition from SSN Management- Best faculty award (II Prize) for 2015-16 in Teachers day Celebration held on 02 Sep 2017.

Mr. Arun Prakash C, Assistant Prof, Published a book chapter "Vision based liquid level inspection system for beverage industries" in the book "Advanced Engineering Research and Applications"

Dr. N. Lakshmi Narasimhan, Asso. Prof/Mech arranged an Industrial Visit to IEEE Chapter of SSNCE to the company KKM Soft Pvt. Ltd. About sixty students visited the company and were introduced on the Virtual Reality facility. On 30th and 31st Aug 2017, a visit was arranged to Mechanical Engg students covering about 120 students for the same company.

Dr. N. Lakshmi Narasimhan, Asso. Prof/Mech, submitted a case study of his research work carried out to Autodesk University upon invitation from Mr. Ramesh Pudale, Autodesk. A possibility for funding is envisaged to extend the work further. (29-8-2017)

Dr. N. Lakshmi Narasimhan and Dr. M. Suresh, Asso. Profs/Mech, submitted two project abstracts each to Autodesk against the request for abstract submission from Mr. Ramesh Pudale, Autodesk. The projects proposed were in the area of sustainable energy systems.

Dr.M.Suresh

Collaborative Project Proposed

Dr M S Alphin is a Co-investigator for the project proposal titled "Effectiveness of a Toothbrush based on Reverse motion technology in oral hygiene and activities of daily living among children" submitted to Department of Health Research Ministry of Health and Family Welfare Government of India. The principal Investigator is Dr V Bijivin Raj from Raagas Dental College Chennai.(20-9-2017)

STUDENT ACTIVITIES:

- ASHOK. R, of Second year, participated in the First aid camp conducted by YRC on 1-9-17
- ARUNKUMAR R, of Third year, Volunteered in first aid camp conducted on AUG-31 BY SSN YRC and was also INVENTE- BLITZ GP volunteer (8 to 9-9-2017)
- S. SAKTHI VEL, HARISH. V, of Third year, Volunteered at First aid camp of YRC on 1-9-17
- Barath Varadaraj K, of Third year, worked as deputy head on the event called Nitro Grand Prix on the invente 2k17 (8 and 9-9-2017)
- PRATHEESHHKUMAR C.N. of Third year, 1. Won the General Quiz in Madras Medical College on 17.9.2017
 2. Finished 2nd in the GoT Quiz in Stanley medical College on 20.9 2017

In the SSN MUN that happened during 15-9-2017 to 17-9-2017,

- Akshay Aravindan, of Final Year, Was Appointed Deputy Secretary General of SSN MUN 2017
- Adhyanth G Ajay, of Final year, served as a general administrator in the sponsorship team of SSN MUN 2017
- Kaavya K, , of Final year, served as the Under Secretary General for Publicity and PR at SSN MUN 2017

Faculty Write up

Webcast of PM's Speech

On Sept 9th, UGC had sent a circular to all Institutions, informing that Prime Minister Modi will be addressing the Youth of the Nation on the occasion of the 125th Anniversary of Swami Vivekananda's Address at the Chicago World Parliament of Religions. The theme was "Young India, New India-A Resurgent Nation: from Sankalp to Siddhi". UGC had requested Institutions to enable students to see the webcast. In spite of the short notice, Dr.M.S.Alphin arranged for the webcast of the speech at mini audi . Dr.K.S.Vijaysekar and Dr.S.suresh Kumar took the responsibility of gathering the students to the hall.

In his address to students from across the nation, Prime Minister Narendra Modi on Monday said those who clean the roads have the first right to chant Vande Mataram. "As I entered, I heard people chanting loudly 'Vande Mataram, Vande Mataram!'... The value of patriotism fills my heart. But do we have the right to say Vande Mataram?" PM Modi said.

He said that those who chant Vande Mataram go and litter the roads. "Whether we clean the roads or not, we do not have the right to litter our motherland," he added.

PM Modi was speaking at Vigyan Bhawan in New Delhi to mark the 125th anniversary of Swami Vivekananda's Chicago address and centenary celebrations of Deendayal Upadhyaya.

He appealed to the youth of the nation to build toilets first before building temples. "Swami Vivekananda said that only rituals will not connect an individual to divinity...he said 'Jan Seva is Prabhu Seva'," he said.

Prime Minister Narendra Modi said Swami Vivekananda gave the concept of 'One Asia'. "He (Swami Vivekanda) said that the solutions to world's problems will come from Asia," PM Modi said.





He said the youth of the country should be job-creators and not job-seekers. PM Modi also urged students to focus on cleanliness while campaigning for university elections.

 $\underline{\text{http://indianexpress.com/article/india/pm-modi-vande-mataram-chant-swami-vivekananda-anniversary-chicago-address-deendaya-upadhyaya-4838173/}$

Arun Prakash writes..





My paper Titled: "Vision based liquid level inspection system for beverage industries", has been published as a book chapter in "Advanced Engineering Research and Applications".



Faculty write up- International conference

Dr. Satheeshkumar Gopal writes...

5th INTERNATIONAL CONFERENCE ON ARTIFICIAL INTELLIGENCE, COMPUTER SCIENCE & INFORMATION TECHNOLOGY 2017, KUIS, PENANG, MALAYSIA (31st july to 1st August)

Our paper titled "Development and Implementation of Visual Odometry System using Quadcopter for Inventory Maintenance" was selected for oral presentation. Armed with the flawless PPT and videos prepared by our students I was there on behalf of our team. (Apeksha Avinash Somalinga, Harish. S, Karnik Ram (ECE), Guides: Ms. S. Hanis (ECE), Dr. G. Satheesh Kumar (Mech)).

There was a wealth of information and motivation that could be derived, from the papers presented, towards our research.

The keynote lecture by Prof. Dr Rozhan M. Idrus of USIM on the title "IT & Society: What's around the corner?" set the tone for the conference. As a highlight he affirmed that for Malaysia and the world, the future would be based on the 'keyword' called Automation.

Topics were ranging from application of AI to forensic science to semantics and even to education. The best part of this conference was the manifestation of strong, close interactions between industries and educational institutions with a well-defined underlying objective from the Malaysian government.

Apart from presenting the paper there was an opportunity to be the moderator for one of the session.

The scenic beauty surrounding the Bayview Beach Resort, the venue for this conference at Penang, provided a serene destressing ambience for the entire period of the conference. Having been in the top slots for tourism among the world countries truthfully their hospitality was classy.

Also found out that Butterfly park and Penang hill are the must see places, among many in Penang. The calm and the composed attitude of the society (even in flea markets) and their belief in societal based research are the two characteristics that stand out at all levels.



On the whole it is everybody's guess that Malaysia is certainly on the fast-track pathway to become a developed country soon.

I would like to thank the conference organizers for this opportunity and Malaysian embassy for making all the tasks including eVisa online (approval in < 24 hours!).



Thanks are due, to our department and the management for the permission to attend and the partial support extended towards meeting the expenditure towards this conference.

Dr. Satheesh Kumar Gopal

Student Write up

T.S.Murali writes..

I am happy to share that the paper that I co-authored and presented at the International conference under Dr.S.Sophia, Assistant Professor, Department of Mathematics has been accepted for publication in the International Journal of Pure and Applied mathematics (IJPAM)

I and my team including Ankit and Neil Ashwin have been selected by KPIT Spark Innovation challenge as well. Our project has to do with smart clothing for military personnel.

I attended the Think Nano 2017 this month which sparked an interest in microfluidics and its applications to drug delivery systems. I have written a post about it on my blog. https://murali98ts.wordpress.com/2017/09/16/my-experience-at-think-nano-2017-iisc-bangalore/

Student write up

S.Deva Prashanth writes...

The English Theatre Group of SSNCE, Lights Out Please staged a play on the 10th of September, 2017. "Spectres Within", written by Srinivas S and directed by Ashwini Raja and Varun Ranganathan, is a dark comedy that revolves around an Indian family that has moved from the US to India. The grandmother soon senses some supernatural activity in the house they've moved into. The play follows the impact this has on the members of the family. Trust is broken, sanity is in question, the integrity of a family falters, the false facades fall and deep-buried secrets unravel.

The play was staged under the banners of Creashakthi, a Theatre Institution and Production Company, as a part of their Campus Theatre Initiative. Two shows were conducted and both received an enthusiastic crowd more than what the auditorium could accommodate. The shows were held at Harishree Vidyalayam, R.A. Puram, a standard host for CTI.



The cast included 10 students and the crew included 14 students, from all the years and departments out of which 6 of them were from the Mechanical Department, Salavadeshwar Harisharan, George Cherian and Chriswin Ebenezer were part of the cast and Deva Prashanth, Mohinish and Vishal Mohan were part of the crew.

They play was a grand success and if you think otherwise, "Deva, Light out please!"



Student write up

Alma Connect and Mentoring matters..

T.S.Murali of third year writes..



The SSN Alumni Connect is an initiative by the Alumni association which focuses on connecting the alumni with the students.

The first step taken as a part of this program is to map a set of alumni with current students interested in getting their help for various purposes.

This opportunity was given on to second, third and final year students. Few second years have reached out to their respective mentors and gained valuable insights from them.

I made sure that the alumni interactions happened regularly along with the help of Arun Prakash Sir (Alumni Coordinator). When I reached out to these alumni, I found that they were busy with their regular work and hence found it difficult to repeat information to various students.

With this in mind, I prepared a set of questions that were usually in the head of any bachelor student and requested Mr. Suneesh to answer them. He responded promptly with the answers with which several students have benefitted.

Looking at the way premier institutions work, it is clear that such interactions must happen constantly. Owing to this, the students are encouraged to use the alma connect portal as well and also maintain a good relationship with the alumni.

The progress that can be expected from this with this regards is

- 1. Alumni talk series for core company placements and Higher studies. (Every student has a unique experience)
- 2. Internship opportunities in the alma connect portal
- 3. Funding grants from the Alumni
- 4. Lectures on Industrial topics

As an SSN Alumni Connect Initiative, Suneesh Kaul, our alumnus, has given plenty of advice to our current students and also has offered to help in the (Statement Of Purpose) SOP process. There is a report that I prepared with the various questions and answers that students usually have with regards to higher studies. Hope you find this useful.

(This report of around 10 pages, is attached as Annexure 1-VeA)

Student Write Up

Akshay Aravindan writes on SSN MUN

An MUN or a Model United nations Conference is a simulation of the United Nations and its various committees. Students represent various countries and participate in debate about agenda of paramount geopolitical importance, relevant in today's society.

SSN MUN in particular is a bastion, upholding the fundamental tenets of diplomacy and peace craft. It has, in its four iterations so far, created better individuals and has raised the proverbial bar of the South Indian Circuit. It aims to bring together students to meet and discuss the prevalent issues of the world in an orderly, composed manner. It is the prerogative and privilege of SSN MUN to curate the best minds under one banner, and to attempt to discover solutions to the world's pressing problems.

In this year's simulation of the conference, six councils were carefully selected and then replicated. These were

- The United Nations General Assembly Disarmament and International Security Committee,
- The United Nations General Assembly Special Political and Decolonization Committee,
- The United Nations Security Council,
- The United Nations Human Rights Council,
- The Emergency Special Session, and our flagship council,
- The Organization of American States.

Solutions Proposed:

Each council had an agenda that has great political, economic, and social significance. The students delegating were of the highest caliber, and every council came up with unique solutions, some of which were previously unknown or not thought of.

For example, in **The United Nations General Assembly Special Political and Decolonization Committee**, the agenda chosen this time was *The Situation in South Sudan*. The delegates in the council went about methodically dissecting the problem, starting from the root causes of corruption and lack of resources, slowly arriving at a multipronged solution which covered almost all the aspects of the issue at hand.

Apart from the conventional solutions of forming a body, the committee figured out how to make the country economically solvent, by managing and reducing taxes on revenues gotten from oil. Another side of the topic was the large number of refugees, and the financial and social constraints they suffer from.

Overall, the three days of debate in The United Nations General Assembly Special Political and Decolonization Committee were extremely fruitful, finally cumulating in a draft resolution that had every single point of contention in mind, along with a solution to the same.

The Organization of American States or the **OAS** was also simulated at the conference. It is a continental organization founded for the purposes of regional solidarity and cooperation among its member states. The OAS's members are the 35 independent states of the Americas. This committee discussed the agenda "*Protectionism and its impact on drug trafficking, economic development and climate change.*"

Delegates divided the agenda into apt subtopics such as measures to reduce illicit drug trafficking, failure of free trade agreements such as North Atlantic Free Trade Agreement, role of China in economic growth of Latin American countries etc. These subtopics helped in consensus building and helped facilitate further debate. This agenda is of great importance as the new President of The United Sates has embraced a protectionist

approach thereby impacting global geopolitics as such.

Some fruitful outcomes from this committee include the need for American countries to indulge in more trade and commerce with Asia and for the setting up of a peer review mechanism within the Americas which will help develop consensus and regional cooperation.

Committee ended successfully with delegates passing three unanimous declarations- Declaration of Protectionism and its impact on climate change, Declaration of Protectionism and its impact on drug trafficking and Declaration of Protectionism and its impact on economic growth.

The United Nations General Assembly Emergency Special Session (UNGA-ESS) had delegates discussing the "Question of Namibia 1981."

Various subtopics such as Apartheid in Africa, exploitation of natural resources in Namibia etc were debated upon. Committee came up with viable solutions such as abolishment of Apartheid, setting up of a committee in Namibia like the one in Ghana to help local inhabitants and urging South Africa to sign the Non Proliferation Treaty.

Some pictures from the conference:









The Airfish

Mech Marvel - 34

Fitted with the engine of a race car -- specifically a 7-litre V8 engine -- and resembling the look of a sleek seaplane, the Airfish 8 is in fact classified as a merchant ship.

Based in Singapore, the company behind it, Wigetworks, hopes to change the way people travel and offer a whole host of other uses with this innovative craft. For Sim Wong Hoo, a shareholder of Wigetworks and Founder of Creative Technology, the goal is to "transform, or revolutionize the high-speed maritime transport industry."

Hovering about 2-6 metres above water and with the capability to reach top speed of 180 km/hr -- 2 to 3 times faster than ferries -- the Airfish 8 doesn't require a jetty or runway to dock since it lands on water. This means that island-exploration becomes all the more easier as the craft can reach areas where ferries and boats would be unable to.



Explaining the possibilities to explore the thousands of islands in Indonesia, Philippines, Polynesia and the Caribbean amongst others, Sim shares that the craft, which currently sits up to 8 passengers, will no doubt offer a better alternative for travel to these countries and "open up many hitherto unexplored frontiers."

Safe and Comfortable: The Wing-In-Ground, simple system operability, minimises the risk of flight accidents and technical errors that may arise from pilot or operator dependency. At a lower flight altitude and above sea-water, passenger altitude sickness or motion sea-sickness is also be significantly reduced. Should an engine hardware failure unexpectedly occur, the WIG is able to land immediately on an ever-present runway merely 1 meter or 2 below

Fast and Fuel-efficient : The WIG operates on aerodynamic lift and literally glides on a air cushion of about 0.5-6 meters above the sea water. The unique design allows it to avoid contact with water (a medium 800 times heavier than air) and its strong yet light composite fibre body allows longer durability than most marine crafts. Compared to larger marine crafts, the WIG is able to consume lesser fuel whilst traversing at a faster speed (80 knots versus 10-20 knots)

Take off and landing in water: The WIG is classified as a marine craft and designed to take off and land on water. It runs on readily available automotive grade fuel and is powered by a car engine that is comparable to its power-to-weight ratio to an aircraft turbo engine. Flying the airfish is so simple so much that a simplified yet effective approach can be taken to the training and qualification of the crew.

As a waterborne vehicle, WIG requires no runway for take-off and landing. Hence, minimizing set up cost incurred by the government or private operators to operate the craft. In addition, berthing station for WIG may be built rapidly with relatively simple, inexpensive and traditional method, such as: combination of wooden jetty and polymer pontoon. Relatively low draught of WIG allows the docking station to be constructed in the shallow water area not to far from the shore line.

Wigetworks Private Limited (Wigetworks) was incorporated in Singapore in April 2004. It was established with the main purposes to commercialize Wing-in-Ground (WIG) effect craft technology and to be the center of excellence of WIG technology.

Details about the company http://www.wigetworks.com/about-us/#thecompany
Details about the airfish can be had at https://www.wigetworks.com/about-us/#thecompany
Details about the airfish can be had at <a href="https://www.forbes.com/sites/tarandipkaur/2017/08/10/airfish-8-this-unique-marine-craft-will-change-the-way-people-travel/#3d615737639d

Watch an Airfish in action at https://youtu.be/TYFEFekPzDM

Attention- Auto enthusiasts

ARAI – Centre of Excellence for Electric Mobility

ARAI, the premier Automotive R&D and Certification Institute in the country, has set up Centre of Excellence for Electric Mobility to support automotive and allied industry for development, evaluation and certification of Electric Vehicles.

This Centre of Excellence houses comprehensive state-of-the-art facilities for testing and evaluation of automobiles and auto components such as traction batteries, motors, controllers, chargers, etc.

The Centre also has capabilities in the areas of light weighting, structural integrity, materials, simulation, etc. which are important for development of electric vehicles.

ITEC India 2017 | 13-15 December 2017 | Pune

ARAI, in association with SAEINDIA and IEEE IAS, is organizing International Transportation Electrification Conference (ITEC) India 2017 from 13-15 December 2017 in Pune (India). The conference will provide common platform to technocrats, professionals and academicians working in electric vehicle technology areas to exchange technological ideas, challenges ahead, technology roadmap, etc. Theme of ITEC 2017 is "Electric Vehicle Ecosystem – Resetting the Future of Mobility".

ITEC India 2017 Expo, being organized concurrently, will have around 40 exhibition booths, showcasing products and technologies by automotive and allied manufacturers, technology and service providers worldwide, in the area of EV technology.

This e-publication is hosted on ARAI website < www.araiindia.com >.

Please use below given link for browsing the contents / downloading the publication:

https://www.araiindia.com/cpanel/Files/NEW_915201750607PMARAI-Update_Apr-Jun2017.pdf

Corporate Story 34

Ramraj Cotton was founded at Avinashi, by entrepreneur and visionary, Mr. K.R.Nagarajan. The company was started with single, unwavering vision – to deliver quality men's ethnic wear to people in the southern states.



"A cloth is woven not just with a thread. It is woven with culture, a sense of tradition. Imagination, sun and rain many such features goes into the weave. From dressing Gods to spinning khadi, on the wheel for personal wear during the freedom struggle, our traditional clothes represents the Indian way of life. Only because of the strength of this tradition have we made a success story out of selling the humble dhoti even in this modern era..."

Ramraj Cotton started out small in the year 1983. With very limited resources and very little financial leverage, Mr. K.R. Nagarajan founded the company on big dreams and huge aspirations.

With several years of marketing experience to back him, Mr. K.R. Nagarajan understood one simple success mantra – the power of branding. He understood that if his product has to stand out, people need to identify it by a brand name. That's how the brand Ramraj was born. (Ramraj incidentally, is a combination of two names – Founder Mr. K. R. Nagarajan and his father Mr. Ramaswamy).

The company's mantra of 'quality without compromise' was the driving force behind its astounding success, even during those early years. Slowly but surely, the company made definite inroads into the South Indian market.

Mr.K.R. Nagarajan has been there and done it all. He has single handedly driven Ramraj Cotton to the heights of success, he has done it with simplicity, humility and confidence.

When Mr. K.R. Nagarajan made a foray into the textile industry, Tirupur was hailed as the 'dollar city' and an undisputed business center. Mr. K.R. Nagarajan chose the road less traveled. He chose Avinashi to start building his dhoti empire. His focus was not on hefty bottom line but on progress and growth for the poor village weaver. Eighteen years of networking with dealers across the length and breadth of South India have ensured Ramraj's leadership in this part of the world. Today, Ramraj spins dhotis,safeguarding the environment and providing employment opportunities for thousands of people across Tamilnadu.

In Keeping with the ideology of the great thinker Vadathri Maharishi who said, "Deeds done with a sense of his responsibilities give life to human society. Each person realizes his responsibilities and works tirelessly in his chosen vocation, the whole of humanity benefits." Ramraj Cotton, too is dedicated to serving humanity by doing its bit for the society.

Infrastructure

Best Machines, Gives Excellent Quality of Products, that's what sets Ramraj Cotton apart for its quality products. Be it the humble socks or the stately shirts, Ramraj Cotton has always used the best of business manufacturing machines and procedures to deliver genuine value to customers. The company has invested in top end machines and high end infrastructure to match the growing demand for its varied products. Here's detailed overview of the Infrastructural Muscle of Ramraj Cotton.

Infrastructural Muscle of Ramraj Cotton. Have a look at all their manufacturing facility at http://www.ramrajcotton.com/wp-content/uploads/2016/10/ramraj%20profile.pdf

Some machines from the long list..







The history:

A failed joint venture in Tirupur, the textile capital of Tamil Nadu, left Mr.K.R. Nagarajan with dhotis worth Rs. 85,000 in return for his investment. He hit the familiar ground of Rayalaseema, where he had worked as a marketer for his previous employer, just to wash his hands off the stock and retrieve his money.

Aspire October 2017 21

But, seeing the demand for dhotis in Rayalseema, he hit upon a new business idea. "I realised if I improve the quality of my cotton, which nobody even tried back then, I could generate a business out of this failed attempt," he said.

He knew that in Tirupur, when people were not labouring in the fields, they were making knitwear in handlooms, found in almost every backyard. He recalls: "I went about town telling people, 'Agriculture is not looking so good. I'm back from Rayalaseema and there is a good price for dhotis; will you make them for me'?" The word spread.

His offer to farmers to shift to textiles came in late-1986, at a time of drought. The cooperative banks were wiling to lend as the alternative was giving out more farm loans, which would only translate into more bad debt.

Sourcing 80s-count cotton, which Nagarajan found prohibitively priced even then, he engaged some relatives and friends in Tirupur to make dhotis at his wholesale unit. With his first batch of white veshtis, Nagarajan approached a retailer in Rayalaseema and pitched his goods at Rs. 110 apiece when the going price was Rs. 60-70.

"I said I'll pay him for unsold goods, but the price stays. I went back after a week to know if my dhotis found purchase, and the man said people wanted more of my dhotis."

RETAIL FORAY

The company's retail entry was a coincidence. In 1999, the Tirupur wholesale unit moved to a more spacious location. "The original place was lying vacant. And since people by then wanted a showroom experience, I decided to set up an outlet there," said Nagarajan. His parents took care of the first show room.

"It was only after my Coimbatore outlet in 2003 that I decided to open more stores, as they create a touch point with customers," he said.

T. Kannan, Managing Director, Thiagarajar Mills, who has seen the rise of Ramraj, said the business concept was innovation in labour: Instead of recruiting staff, he convinced weavers to take up contracts, saving him the capital on machines and land.

" Now, over 1,000 families in the Tirupur belt have contracts with him. "It is one of the most successful brands in the last decade," said Kannan.

SUB-BRANDS

Ramraj engages 4,500 workers to convert 2.5 lakh metres of cotton yarn into dhotis, shirts and innerwear every day. It sources over 2,000 varieties of cotton once a year to beat cotton price fluctuations.

The brand now has six sub-brands for t-shirts, running pants, innerwear, silk dhotis and shirts, women's wear, children's dresses and linen apparel. By April 2014, these brands will graduate from Ramraj outlets to the shelves of multi-brand operators, where they will stand collar to collar with global brands.

Dhotis and shirts are Ramraj Cotton's bread and butter — over 95 per cent of its revenues come from them. As the company heads towards the Rs. 1,000 crore revenue mark, it looks to expand its brand through t-shirts, women's wear and silk apparel.

Nagarajan is not even looking to tap the young fascinated by international labels. "There are two sides to the India fashion story: Western styles and its stitching standards and, on the other side, the average price-conscious Indian who is middle-aged and does not aspire for big labels. There are plenty of them." His target group for t-shirts is the 35-year-old.

 $Reproduced \ from \ \underline{http://www.thehindubusinessline.com/companies/ramraj-weaves-a-success-story-with-labour-innovation/article5258050.ece$

Product Challenges:



Many hotels did not allow people with Dhotis. He had to strongly advertise in TV with his "Salute Ramrajukku Salute", showcasing men of substance getting out of posh cars, in dhotis and being saluted by all. That helped to improve the image of dhotis.

The other difficulty was the inability to wear a dhoti- the fear of falling off! He handled it deftly by introducing a **velcro based dhoti**. It is amazing to see a **dhoti belt** – a slender belt without bucjkles and provided with velcro to go unnoticed along with dhothis.

There is a range of inner wears, accessories, socks, ties etc and a large collection of womens' wear and kids' wear. Exploer their online store at https://www.ramrajcotton.in/

Jobs at Ramraj Cotton:

There are exclusive listing fo jobs for showroom and marketing. For details, visit http://www.ramrajcotton.com/jobs/marketing-jobs/

The Founder Mr.KR.Nagarajan, brings out a monthly magazine *Venmai Ennangal*, which focuses on contemporary social issues. The latest publication talks about teenagers and how they can cope with the distractions and uncertainties in their lives.

"My apparel depicts purity on the outside, and my attempt through this magazine is to bring about purity in the mindset of my shareholders as well. Money, a house and car give you happiness initially, but it is purity of character that will ensure you sail through the toughest of times," he concludes.



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http://www.ramrajcotton.com/media-room-detail/?Eyear=2017&wlanguage=Tamil

With the extraordinary machinery and visionary approach to marketing, Ramraj Cotton is one of our potential destinations for internship for 2017

This Issue has Two Annexures

Anx 1 – Questions and Answers on Going Abroad

Anx 2 – Write up on Mech part of Invente

Purpose of Annexure is to serve only those who need it and for ease of Onward forwards to those who may benefit.

Amazing Innovation- 37

Umbrella for cycle

When it comes to cycling in the rain, probably the best way of staying dry is to simply wear a full-body rain suit. Putting it on and taking it off can be a hassle, though, plus you can get pretty hot underneath it.



German inventor Thomas Schmidt has come up with a bicycle-mounted umbrella that you stick your head through. Known as the Under Cover, it mounts on the bike's down tube, meaning that it doesn't turn back and forth with the handlebars. It extends out over the bars in front, and back over the cyclist - or most of their upper body, at least in the rear. Their head goes up through a collar tube built into the umbrella, and into an integrated waterproof hood. When not in use, the whole thing folds/telescopes down into an included nylon bag. which can be Velcro-strapped to the bike's frame. So, what's the point? Well, because it isn't a garment that's worn against the body (except for the head), users shouldn't get as hot and sweaty as they would in a rain jacket and pants. That said, the arrangement does look like it could be a little awkward in certain situations, and Schmidt himself doesn't advise using it in strong winds that could catch the umbrella.

watch it in action at https://youtu.be/j-1PU5bSx8c

Amazing Innovation-38

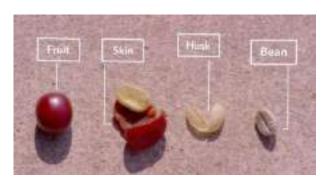
Cup made of coffee husk

HuskeeCup is a durable, reusable ceramic alternative made from coffee husk. It's comfortable to hold & keeps your coffee hotter for longer!

Built to handle the rigors of a café whilst remaining elegant & attractive, HuskeeCup is ideologically driven, functionally seamless & downright good-looking.

Each year, during the harvest season, our team are faced with tonnes of raw waste in the form of coffee husk from the processing of coffee.

With mountains of beautiful organic material piling up around us and no sustainable way to deal with it, we asked ourselves the question, "What can we do with this?"





HuskeeCup is a **reusable**, **recyclable** cup made from **discarded coffee husk**. It's chip and crack resistant, and is designed to last years **in both cafe and home environments**.

Engineered to keep your coffee hotter for longer, HuskeeCup is durable and comfortable to hold. It's dishwasher friendly and comes in a range of sizes, with a one-size-fits-all Universal Saucer and Lid.

By using coffee husk in the creation of HuskeeCup, we are recycling **hundreds of tonnes of waste** material from the production of coffee. Our dream is to realize sustainability for cafes and home users while achieving zero waste at the farm. HuskeeCup is the first step in fulfilling this mission.

Whilst aiming to revolutionize waste reduction in the production of coffee, we also saw an opportunity in HuskeeCup to innovate a cup that redefines consumer expectations.

The result? A cup that outperforms ceramics in its design, functionality and eco-awesomeness.

https://www.indiegogo.com/projects/huskeecup-waste-made-beautiful-coffee-design#/

Amazing Innovation- 39

Artificial leather



To make leather, first you have to raise a cow.

Or another animal, though you really do need the whole animal because since pretty much the beginning of time, it has not been possible to grow skin for leather without the attendant flesh and bone and blood and guts.

But now a company called Modern Meadow says it can "biofabricate" leather without the rest of the cow. It does not quite grow cow skin, either; it grows a strain of yeast engineered to produce collagen, the protein in skin that gives leather its strength and stretch. Traditionally, making leather amounts to removing almost everything from skin (fat, hair, etc.) that <code>isn't</code> collagen. Modern Meadow is basically skipping ahead. Once purified, pressed into sheets, and tanned, their vat-grown collagen becomes, essentially, leather.

No dead cows. No scars or nicks. And none of the petrochemicals used to make pleather or vegan leather.

By tweaking the collagen network, the team can make leather whose size is unlimited by the physical size of cattle, or more tear resistant, or impossibly thin. It could even tinker with the molecular structure of collagen—optimizing it for one property or another.

Amazing Innovation- 40

Shock absorbing filler for cycle tyres

Most mountain bikers wouldn't want shock absorbers that were simply springy air chambers with no damping. According to the guys at CushCore, however, that's exactly what tires are. Their solution?

An energy-absorbing foam insert that sits inside a tubeless tire, acting as a damper while also adding flat protection and improving cornering. The CushCore insert only occupies half of the space inside the tire, leaving an air pocket underneath the tread – the air pressure is set by the rider using a standard pump. That pocket acts as a tuneable spring, while the closed-cell foam insert serves as a damper. The setup reportedly makes the tire less likely to bounce off of obstacles such as rocks and roots, resulting in a smoother ride.



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Additionally, the insert protects against pinch flats. In fact, riders can improve traction by running their tires at a lower air pressure than would ordinarily be possible. What's more, if the rider *does* get a flat, the insert reportedly provides enough support for them to still limp home with no air in the tire. The system is sealant-compatible.

Finally, the insert is claimed to add lateral stability to the inner portion of the tire, where it hooks onto the rim. This is said to keep the tire from squirming sideways relative to the rim while cornering, resulting in increased sidewall stability and lessening the chances of the tire "burping" right off the rim.



More details at http://www.cushcore.com/

watch it in action at https://youtu.be/SkBV6JKuG11

Alumni Info

Ramya R writes..



Ramya of 2013-17 batch, joined IIM Indore for her MBA.

I have been placed at General Electric for my summer internship in April 2018.

I will be working in the Finance division of the company.

Wanted to share the good news with you!

Forthcoming events

Workshops / Faculty Development programs

- The Dept of Robotics, PSG College of Technology, Coimbatoe, is organizing a one day workshop on Robotic welding and its applications, on **Oct 7, 2017.**Details at http://www.psgtech.edu/Robotic%20Welding.pdf
- A GIAN course entitled "REFRIGERATION TECHNOLOGY WITH NATURAL REFRIGERANTS, SPECIALIZATION ON R744 (CO2)" is being offered By Prof. (Dr.) Armin Hafner, University of Science and Technology (NTNU), Norway at IIT Madras during **9-13 (Monday Friday) October 2017**; 4 to 7 pm each day. Practical sessions will be on 35 kW multi-evaporator, multi ejector CO2 refrigeration system on any convenient time during 9-14 (Monday Saturday) October 2017.

 Visit http://www.gian.iitkgp.ac.in/ to register and http://hosteldine.iitm.ac.in/iitmhostel for hostel accommodation
- Dept of mech engg, St.Joseph's college of engg, Chennai, is organizing a two week AICTE sponsored FDP on "Fundamentals of vinration measurement, analysis and control" during **Oct 30 to Nov 10, 2017**. details at https://docs.google.com/forms/d/e/1FAIpQLSdEQ1E_1gFQW5oqO3g4A3chh-ql3duJv49VqX6HqBqQqiNpkQ/viewform?c=0&w=1
- PSG JANATICS Centre for Pneumatics and Automation, is organizing an AICTE Sponsored Two Weeks Faculty Development Programme on "Industrial Hydraulics and Pneumatics", during 29th October 11th November, 2017 .The participants will be given III –AC to & fro fare by the shortest railway route, and free boarding & lodging. For further details and registration please visit http://www.psgtech.edu/janatics/
- The Applied Mechanics dept of IIT Madras, is organizing a one week course on 'Analysis and Design of Piezoelectric Energy Harvester' as a part of GIAN. Prof. Sondipon Adhikari from School of Engineering, Swansea University has kindly consented to offer the course during October 30th to November 3rd, 2017* at IIT MADRAS. Interested participants may register at http://www.gian.iitkgp.ac.in/GREGN/index

Conferences

October 2017

2nd International Conference on Advances in Materials Science and Technology (ICAMST-2017), 9-11 October 2017, Centre for Crystal Growth, VIT University, Vellore-632014, Tamilnadu. Details at https://mmse.xyz/en/2-international-conference-on-advances-in-materials-science-and-technology/

November 2017

The Department of Physics, B.S.Abdur Rahman University, Chennai, is organizing a Two days National conference on "RECENT TRENDS IN FUNCTIONAL MATERIALS" during NOV 15-16, 2017.: www.bsauniv.ac.in Last date for paper submission: 01.10.2017

School of Mechanical and Building Sciences, VIT University, Chennai, is organizing a two day National Conference on Surface Science and Technology during 10th and 11th of November,2017. All the submitted papers will be published in Scopus indexed "Journal of Surface Science and Technology" after due review and acceptance by the editorial board of the journal. Abstract due October 10, 2017.

December 2017

- International Conference on Advances in Thermal System, Materials and Design Engineering (ATSMDE 2017) will be held at VJTI Mumbai, Maharashtra-India during Dec. 21 22, 2017. Papers are invited for presentation and selected papers will be published in Springer conference proceedings.

 Deadlines: Submission of manuscript 23rd Oct. 2017

 More details can be found at http://vjti.ac.in/images/ASTMDE_2017/index.html
- Cauvery Institute of Technology, Mandya, Karnataka, is organizing an International Conference on Emerging Trends in Mechanical Engineering (ETME-2017) during Dec27-28, 2017. Full paper submission by Nov 15, 2017. Accepted papers will be published in IJRAME (International Journal of Aeronautical and Mechanical engineering).
- The Indian Institute of Welding is organizing the International Congress 2017 (IC2017) of the International Institute of welding during 7-9-Dec 2017 at the Chennai Trade Centre.

January 2018

- Guru Nank Institute of Technology is conducting an International conference on Mechanical Engineering / civil engineering, ICIME -2018: International Conference on INNOVATIONS IN MECHANICAL ENGINEERING (ICIME- 2018). The conference will be held at HYDERABAD, India during January 5-6, 2018. details at http://icime-gni.org/
- PAPERS Submission at : papers@icime-gni.org PAPER SUBMISSION DEADLINE:

 Abstract Dead line : 5 th October , 2017. Full paper Dead line : 20 th October , 2017.

 Selected Papers will be published in Springer series, Journal of Remanufacturing , ASCE, International journal of advanced trends in engineering and Technology

February 2018

The Department of Chemical Engineering, SSNCE, is organizing the 3rd International Conference on Recent Advancements in "Chemical, Environmental & Energy Engineering (RACEEE-2018)" during 15-16 February 2018. Details at www.raceee2018.in. Accepted papers will be published in reputed Journals of Elsevier and Springer..

March 2018

SRM University, Chennai (Madras), is organizing the 2nd International Conference on Advances in Mechanical Engineering (ICAME 2018, http://mysrm.srmuniv.ac.in/icame-2018) from March 22 – 24, 2018. For additional information please visit the conference website at http://mysrm.srmuniv.ac.in/icame-2018.

Prospective authors are invited to electronically submit abstracts of 500 - 1000 words via Email: icame2018.srm@gmail.com

June 2018



ASME Power & Energy 2018 is being held June 26–30 at Disney's Contemporary Resort in Lake Buena Vista, Florida. It brings together three of ASME's energy events in one location, **covering power generation**, **energy storage and energy sustainability**. Abstract due Oct 16, 2017. Details at http://www.asme.org/events/power-energy

July 2018



7th International Conference on Fracture Fatigue and Wear, FFW 2018
Ghent, Belgium, 9-10 July 2018. Abstract submission (deadline 12 January 2018) to FFW 2018 secretariat: ffw@ugent.be Conference website: http://www.ffw.ugent.be/

September 2018



The 4th International Conference on BioTribology (ICoBT 2018) will be held in Montreal, Canada, on 26-29 September 2018. Submit abstracts by 20 April, 2018. https://www.elsevier.com/events/conferences/international-conference-on-biotribology

December 2018



The All India Manufacturing Technology, Design and Research (AIMTDR) conference 2018, will be conducted during 13th-15th Dec 2018 – at Anna University. Submission of paper 31 March 2018. http://aimtdr2018.com/theme/

Global Competition from Boeing Attention-Innovators from all disciplines



RULES

The goal of the GoFly Prize is to foster the development of safe, quiet, ultra-compact, near-VTOL personal flying devices capable of flying twenty miles while carrying a single person.

The challenge consists of three progressive payout opportunities spanning two years beginning in 2017:

Phase I:

• Up to ten \$20,000 prizes awarded based on a written report.

Phase II:

• Up to four \$50,000 prizes awarded based on revised Phase I material (or for new teams new Phase I material) and demonstrated performance of progress to date.

Fly-off:

- 1. One \$1,000,000 Grand Prize awarded for the best compliant overall fly-off score.
- 2. One \$250,000 prize for the quietest compliant entry.
- 3. One \$250,000 prize for the smallest compliant entry.
- 4. One \$100,000 prize for disruptive advancement of the state of the art.

Fly-off scores for the Grand Prize will be based on highly challenging criteria in the following areas:

- Performance, including speed & endurance
- · The ability to achieve near vertical takeoff and landing
- · Quietness
- Compactness
- · The experience of open-air flight

What the device looks like or how it works to accomplish the task, and accomplish it safely, is up to you.

All materials must be in English and be submitted electronically by the appropriate deadline through the <u>competition</u> website. No exceptions.

April 4, 2018: Phase I registration deadline

To be eligible to participate in the GoFly Prize, teams must complete all registration and legal forms, teams must pay the registration fee, and be accepted by GoFly into the competition. A complete list of documents and all forms and templates are available at the <u>competition website</u>. Teams may revise registration information at any time and are responsible for keeping information up to date.

April 18, 2018: Phase I submission deadline

Teams will submit a written design report summarizing the project, including as required appendices:

- Summary spec sheet
- Draft safety report
- A publicly-releasable graphic representation (silhouette or abstracted cartoon, e.g.) of the entry to accompany announcement of awards

May 29, 2018: Phase I awards issued

Based on the Phase I report scores, and at the discretion of the judges, Phase I winners will be announced and prize money

issued. The winners will be announced publicly. However, their work will remain private (except for the publicly-releasable graphic).

December 8, 2018: Phase II registration deadline

Regardless of Phase I participation, all teams must register for Phase II by the Phase II registration deadline. To be eligible to participate in Phase II of the GoFly Prize, teams must complete all registration and legal forms, procure required insurance, and be accepted by GoFly into the competition. A complete list of documents are available at the <u>competition</u> website.

February 6, 2019: Phase II submission deadline

Teams will submit an up-to-date design report (all sections, including Phase I appendices), with the additional required appendices:

- Status report
- Evidence of steps toward legal eligibility to fly
- · Flight logs to date
- Draft of description of means of measuring fuel reserves (for devices whereby fuel weight measurement method is inapplicable)
- Draft Operator's Manual

March 28, 2019: Phase II awards and fly-off invitation issued

Based on the progress to date as exemplified in the Phase II submission, and at the discretion of the judges, Phase II winners will be announced and prize money issued. The winners will be announced publicly. However, their work will remain private (except for the publicly-releasable graphic).

Fly-off participation is by invitation only. Invitations to participate in the fly-off competition will be extended to teams meeting all Phase II submission requirements.

September 2019: Flight readiness review

A flight readiness review will be supported by a flight readiness report, which must include:

- Proof of legal eligibility to fly
- Flight logs showing at least 10% of safe prior flight minimums
- Final summary spec sheet
- Final safety report

October 2019: Final Fly-off

Teams must arrive at the fly-off prepared with device, operator, crew, supplies, and support equipment necessary to complete all fly-off tech inspection and flight demonstration tasks.

Materials that must be presented to organizers include:

- Logs of safe prior flight minimums
- Affidavit that entry is the same as has been represented to organizers and authorities and that has completed the documented and logged testing
- Optional: drawings or other aids to assist judges in verifying sightlines compliance
- Means of measuring fuel reserves (for devices whereby fuel weight measurement method is inapplicable)
- Final Operator's Manual (including but not limited to required inspections and functional checks to ensure safe and working condition)
- Data submitted may be marked to protect Intellectual Property as detailed in the Master Team Agreement.

Research News from MSP



Internship at Indian Academy of Sciences

Applications are invited from interested students and teachers from all universities and colleges affiliated to UGC/AICTE/MCI/Accredited Institutions of State Universities for these Fellowships. The application should include: (a) the application form in the prescribed format; (b) scanned copies of marks sheets from class X till the last examination; (c) a write-up (in about 150-250 words) as to what the applicant wants to learn and achieve.



Dr.Muthu Senthil Pandian SSNResearch Centre

Student applicants should provide the email id of one of their teachers or HoD familiar with their work. The Academy will approach them for a recommendation letter in the prescribed format. The selected candidate should work with the assigned guide for two months any time during the calendar year, preferably during the summer.

Applications should be submitted **by logging onto** one of our websites [www.ias.ac.in; http://www.insaindia.res.in and www.nasi.res.in]. The registration number assigned soon after the online submission must be quoted in all future correspondence. The last date for receipt of online applications is 30 November 2017.

Website: http://web-japps.ias.ac.in:8080/fellowship2018/index.html



Support to Tamil Publications

The objective is to encourage publishers, researchers and scientists to bring out scientific publications in Tamil. These publications should be useful to children, school students and rural mass. For the year 2017-2018, to get the partial financial assistance under the scheme, **Two copies** of the proposals (in the format) may be submitted to **The Member Secretary**, **Tamilnadu State Council for Science and Technology, DOTE Campus, Chennai - 600 025 on or before 5.00PM on 13 Oct 2017.** Website: http://www.tanscst.nic.in/



Materials for Energy Conservation and Storage (MECSP)- DST call for proposals

This is a theme based initiative to support research and development for entire spectrum of energy conservation and storage technologies from early stage research to technology breakthroughs in materials, systems and scalable technologies to maximise resource use efficiency. This initiative supports feasibility assessment of fresh ideas/ concepts, including various emerging and disruptive technologies, for their potential conversion into useful technology/ product.

Suggested research 'themes'

Novel photochemical materials systems. Multifunctional materials for energy applications. Materials for energy conversion and storage. Materials modelling and characterisation.

Structural and coating materials.

Smart materials for energy applications.

New electrochemical and catalytically active and thermoelectrically materials.

Optimized ceramic-based composites and new metallic alloys for the highest thermo mechanical loading conditions.

Eligibility

This call invites proposals from Indian applicants in multidisciplinary consortium only. The consortium must involve a minimum of five academic / research institutions to submit a proposal for multi-institutional research centres. Indian applicants are advised to interact with Scientists from public as well as private sector and academic/ research institutions for formulating the proposal. Applications are to be submitted by consortia of Faculties/Scientists working in regular position in recognised Academic Organisation/Public funded R&D institution/Laboratories etc. Participation of industry is desirable. The roles and responsibilities of each partner should be clearly delineated in the proposal. The industrial partner should have proven standing and R&D capability in the area of Energy Materials. Deadline for dull proposals: 01 November 2017 Website: http://www.dst.gov.in/callforproposals/multi-institutional-centres-materials-energy-conservation-and-storage-platform

Inspiring Life Stories

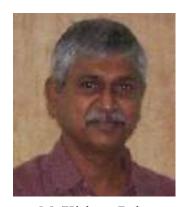
As told by a woman:

After a meeting, I was coming out of a hotel and I was looking for my car keys. They were not in my pockets. A quick search in the meeting room, it wasn't there too.

Suddenly I realized I must have left them in the car.

My theory is the ignition is the best place not to lose them

My husband's theory is the car will be stolen if left at the ignition key slot!



Mr/Kishore Babu Schwing Stetter

Immediately, I rushed to the parking lot and came to a terrifying conclusion His theory was right. The parking lot was empty.

I immediately called the police. I gave them my location, description of the car, place I parked, etc. I equally confessed that I had left my keys in the car, and that the car had been stolen.

Then I made the most difficult call of all, to my husband, "Honey (I stammered; I always call him 'honey' in times like these), I left my keys in the car and it has been stolen."

There was a big silence. I thought the call had been dropped, but then I heard his voice. "Idiot", he shouted, "I dropped you at the hotel!"

Now it was my time to be silent. Embarrassed, and happy as well, I said, "Well, then please come and get me."

He shouted again, "I will, as soon as I convince this policeman, that I have not stolen your car."

Moral of the story:

- When memory fades and we start forgetting things, dates and events, be sure and ready to meet some embarrassing moments......
- One can get away at home front with near & dear ones. But at work place, it will be really tough to tide over......

Thanks & Regards -

Kishore Babu HR - Department SCHWING Stetter India Private Limited

TAME your emotions

From the desk of Ramki Happy Morning

Recently I was watching a clip on Circus. I was remembering my childhood days in Bangalore wherein we use to go and watch circus in Majestic area where currently we have the Bus station.



- In the clip which I watched, the event began with the ringmaster welcoming the audience followed by a few balatrons performing an entertaining dance.
- After sometime, the ringmaster performed an act which involved a tiger jumping through a hoop on his command.
- I was spellbound to see such a fierce and strong animal obey each word of the ringmaster. The ringmaster tamed the wild beast for it to obey his command; if it was not for the training given by the ringmaster, the tiger would have devoured the ringmaster for supper.
- This episode got me thinking even when the tiger was whipped by the ringmaster, it managed to control its emotions and jump through the hoop.
- Now, if a wild beast such as a tiger can be tamed to control its emotions, how can we as human beings, with a balanced mind, let our emotions dictate our behavior?
- Human beings will portray his or her worst form when he or she is emotionally volatile.
 A person who is not emotionally sound will have control neither on his / her words nor
 on his / her actions. This will conspire him / her to be a victim of a catastrophic
 situation.
- In this world, if anyone else has the ability to manipulate our emotions and bring the
 worst side of us to the surface, then we are not the master of ourselves. We are a
 mere puppet in the hands of the society or anybody outside of us.
- In order to master ourselves, we need to be the master of our emotions, because
 no one has the right to control our emotions from outside and hinder our inner
 peace.
- So, let's all learn to have self-control and tame ourselves in the worst situations as the word "TAME" stands for "Total Authority over Mind and Emotions"

Wishing you most & more

Have a great day & wonderful week

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Compiled and released by HoD Mech

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