Newsletter

Volume 8, Issue 9, September 2018

Mechanical

Aspire

Achievements in Sports, Projects, Industry, Research and Education

All About Nobel Prize- Part 57

Sir V.S Naipaul

Nobel Prize in Literature, 2001

Sir V. S. Naipaul (1932-2018)

The Nobel Prize in Literature 2001 was awarded to Sir Vidiadhar Surajprasad Naipaul "for having united perceptive narrative and incorruptible scrutiny in works that compel us to see the presence of suppressed histories."

He was born in Trinidad in a family with Indian roots, resided in England as an adult. He wrote about, India, Africa, the Islamic world, and South and North America in his novels and non-fiction works. He is known for his comic early novels set in Trinidad and Tobago, his bleaker later novels of the wider world, and his autobiographical chronicles of life and travels. He published more than thirty books, both of fiction and nonfiction, over some fifty years.

At University College, Oxford, Naipaul's early attempts at writing, he felt, were contrived. Lonely and unsure of his ability and calling, he became depressed. In April 1952, he took an impulsive trip to Spain, where he quickly spent all he had saved. He called his impulsive trip "a nervous breakdown". Thirty years later, he called it "something like a mental illness".

In 1952, before visiting Spain, Naipaul met Patricia Ann Hale, his future wife, at a college play. With Hale's support, he began to recover and gradually to write. She became a partner in planning his career. Her family was hostile to the relationship; his was unenthusiastic. In June 1953, Naipaul and Hale graduated from Oxford.

He began to travel for long periods in India and Africa. It was at a time of decolonisation, when so many people the whole world over had to reassess their identity. Naipaul saw for himself the resulting turmoil of emotions, that collision of self-serving myth and guilt which make up today's bewildered world and prevents people from coming to terms with who they really are, and to know how to treat one another. On these travels he was exploring nothing less than the meaning of culture and history.

Each one of us, his books declare, can choose to be a free individual. It is a matter of will and choice, and above all intellect. Critics have sometimes argued that people – in the Third World especially – are trapped in their culture and history without possibility of choice, and can only be free if others make them so. To them, V.S. Naipaul's vision that they have to take responsibility for themselves can seem like some sort of First World privilege, and a conservative philosophy at that.

The Swedish Academy praised his work "Naipaul is a modern philosopher carrying on the tradition that started originally with Lettres persanes and Candide. In a vigilant style, which has been deservedly admired, he transforms rage into precision and allows events to speak with their own inherent irony."

Source: nobelprize.org

Info to Alumni- Campus Update

- The fresh batch under Autonomous Scheme, R2018, joined us on 09.08.2018. After two weeks of orientation, regular classes started on 27th August.

- SSN Alumni Association conducted a placement workshop for all the Final year B.E/ B.Tech & M.E./ M.Tech Students on Saturday, **4th August 2018** at SSN Campus.

- **Eighteenth Graduation Day** was conducted on Aug 25th. Prof.M.K.Surappa, Vice Chancellor of Anna University, graced the occasion and distributed certificates to the graduands.

Prof.Thiruvenkataswamy writes..

Dept of English, SSN along with Dept of English, Anna University will be organizing a Two-Day International Conference on 'Inclusive and Equitable Quality Education in ELT', during 26-27 October 2018.

Mr.A.S.Sriram writes…

SSN Career Development Centre organized a 3-day company-specific training program for 2019 Batch students for TCS, Cognizant and Infosys from August 27th (Monday) to August 29th (Wednesday) with the help of external training partner Six Phrase.

Dr.P. Balaji writes…

Anna university nominated our college as a zonal sports coordinating centre for the Anna university zone –III colleges for the academic year 2018-19. We have organized the zonal sports committee meeting for the Anna university zone–3 colleges and 21 Directors of Physical education attended the meeting.

Madhan. A

Madhan. A of 2018 passed out batch has joined as Project Associate in Foldscope project, under the guidance of Ms.P.Kaythry, NSS Program Officer

Ms.P.Kaythry

Info to Alumni- Department Update

External Recognition:

Dr. M S Alphin, Associate Professor, was invited for Comprehensive Examination and Doctoral committee meeting for part time PhD Scholar Mr. Libu George B at Vellore Institute of Technology, Vellore.[18.08.2018]

Dr.D.Ananthapadmanaban,Associate Professor,Dept of Mechanical Engineering,SSN College of Engineering reviewed a paper titled “Dynamic Modeling and Analysis of Wind Turbine Blade of Piezoelectric Plate Shell” to be presented in the 6th Global Conference on Polymers and Composites PCM 2019,China[20.08.2018]

Dr.K.S.Vijay Sekar, Asso.Professor has been invited as a Technical committee member to the 3rd International Conference on Frontiers of Composite Materials (ICFCM2018), which will be held in Sydney, Australia during November 16-18, 2018.[21.08.2018]

Dr.K.S.Vijay Sekar, Asso.Professor, inducted as Senior Member of "South Asia Institute of Science and Engineering", (SAISE) , Hong Kong, China.[13.08.2018]

Dr.L.Poovazhagan, Assoc.Prof./Mech., reviewed a paper titled "Design and Implementation of an Online Based Virtual Office Management System" for The Open Mechanical Engineering Journal (Scopus Indexed). [23.08.2018]

Dr. K. Jayakumar, Associate Professor, Dept. of Mechanical Engineering reviewed a paper titled “Fabrication and Evaluation of Mechanical Properties of Recycled High Density Polyethylene/Aloevera Fiber Composites” for Journal of Industrial Textiles, SAGE publication.[25.08.2018]

Dr. B. Anand Ronald, Assoc. Prof./ Mech, reviewed 4 technical papers for AIMTDR 2018 conference.[27.08.2018]

Dr. B. Anand Ronald

Research Publications

Dr M S Alphin, Associate Professor has got his paper titled “Micromotion of Immediately Loaded Zirconia Dental Implants for Various Parametric Conditions: A Three-Dimensional Finite Element Study” accepted for publication in- J.Biomater. Tissue Eng. 8, 962–971 (2018). Co Authors: D Velmurugan, and M S Alphin (Thomson router 0.78 and Anna Univ Annex I listed). [01.08.2018]

Dr.K.S.Vijay Sekar, Asso.Professor, has got his paper titled "Influence of Failure model and Friction factor in 3D FEA simulation of Slot Milling of Carbon Fiber Reinforced Polymer Composites", accepted for presentation in the 3rd International Conference on Frontiers of Composite Materials, (ICFCM2018) Sydney, Australia during November 16-18, 2018. Materials science forum is publishing the proceedings, indexed in Scopus. The paper is coauthored by C.Prakash, his PhD scholar.[01.08.2018]

Dr. K.S. Vijay Sekar, Asso.Professor, paper titled" Investigation of friction models in the machining of Inconel 625 Super Alloy using FEM" was presented in the 3rd International conference on Advances in Materials and Manufacturing applications, IConAMMA-2018, conducted by Amrita University, Bengaluru. The coauthors of the paper are Manoranjan K S, Harish Narayanan V, Manoj Kumar, T Ashwin R, UG students of 2018 batch. The paper was presented by Manoranjan KS.[17.08.2018]

Dr.D.Ananthapadmanaban,Associate Professor, submitted a Chapter on "Selective Characterization of Geopolymers" for InTech Publishers online publishing house based in U.K.He has also revised the submission based on reviewers comments and sent the revised Chapter for possible publication in the book on Geopolymers. [21.08.2018]

Dr.D.Ananthapadmanaban completed the second review of the paper titled "The effect of drilling-induced delamination on buckling behavior of open hole composite laminates under compressive loading" for the CMSE 2018 International Conference to be held in Xian,Shanxi,China during November,2018.[23.08.2018]

Dr. M. Dhananchezian

Project Proposal

Dr.M. Dhananchezian, associate professor, submitted a project proposal titled, "Investigation on the use of multiple liquid nitrogen jets for cryogenic machining of aerospace Ni-base super alloys", to DST – SERB – ECR (Early Career Research Award) for a funding of Rs. 54, 45,422. [13.08.2018]

Dr.K.S.Vijay Sekar, Asso.Professor, submitted a proposal to DST, for International Travel Support (ITS - Funding) to present a paper in the 3rd International Conference on Frontiers of Composite Materials, Sydney, Australia between November 16 and 18, 2018. [21.08.2018]

Dr. S. Suresh Kumar has submitted a project proposal titled "Improved Passive Safety Feature of car Bumper Beam using Aluminium Honey Comb Panel and Magnesium Metal Foam" to **DST – ECRA**. Funding requested is 30.5 lakhs.

Seminar Attended

Dr.K.S.Vijay Sekar, Asso.Professor, attended a seminar on " Data analysis using MATLAB", organised by SSN School of Advanced Career Education in coordination with Mathworks Ltd. [20.08.2018]

Department Activity

A guest lecture was arranged by Dr.M.Nalla Mohamed and Dr.Ananthapadmanaban on 14.08.18 for our II Year 'A' Section and III Year 'B' Section students. The lecture was delivered by Dr.T.R.Vijayaram, Director Research, Galgotia University on the topic "Recent advances in Castings and their comparison with traditional methods".[14.08.18]

Dr.K.S.Vijay Sekar, Asso.Professor, conducted the Annual Glider Workshop for the II year B.E. Mechanical Engineering students. The students were mentored and trained by the Final year B.E. Mechanical students of the SSN Aero modeling club.[25.08.2018]

Dr. B. Anand Ronald, participated in the Sing a Song, Game Show & Quiz event for Teachers Day cultural program [29.08.2018]

Dr. S. Somasundaram

Industry Interaction

Dr. N. Lakshmi Narasimhan, Associate Prof/Mech, made a presentation to the Industrial Panel from Preethi Kitchen Appliances on the collaborative project titled Studies on the performance improvement of LPG burners. Dr. S. Somasundaram, Assoc. Prof/Mech and seven student members of Third Year Mech joined the discussion and made their presentations who are involved in this project as Joint Project Coordinator and Project members respectively. [28.08.2018]

PhD

Mr.A.Praveen Kumar, Full time research scholar (1514299713) under the guidance of Dr.M.Nalla Mohamed has completed his Ph.D Viva-voce. The title of the thesis is “Numerical and experimental investigations on the axial crushing characteristics of aluminium and composite wrapped aluminium tubes”.[02.08.2018]

S. Arokiasamy, Part Time Scholar of Dr. B . Anand Ronald, Assoc. Prof/ Mech., successfully defended his Ph.D thesis titled "Processing and Characterization of Magnesium Based Composites" [24.08.2018]

External Recognition- Student:

Team captained by K. Gokul (4th Year, Mech) became the National Champions in the All India Silambam Premier League. (More details in the student write up section)

Student Activity

Pranaav Sankar S,3rd year, Attended the Virtual Round of National Superkarting -2018 held at Ujjain. [18-08-2018 to 19-18-2018]

Santhosh Kumar A, 4th year, Organic farming as a part of NSS Program [01-08-2018 to 31-08-2018]

Achievements in sports:

D.Ananth (3rd year, Mechanical) has participated in:

- Tamil Nadu State under- 21 ranking Table Tennis tournament organized by Tamilnadu Table Tennis Association, Chennai and he has secured the first place. (28.6.18 to 1.7.18)
- National Table tennis ranking tournament organized by Chandigarh TT Association.(5.7.18 to 10.7.18)
- National Table tennis ranking tournament organized By Indoor TT Association. (Category - U21 Quarter finalist) (12.7.18 to 17.7.18)
- Tamil Nadu Open Table Tennis tournament 2018 organized By YMCA Madras. (19.7.18 to 21.7.18)

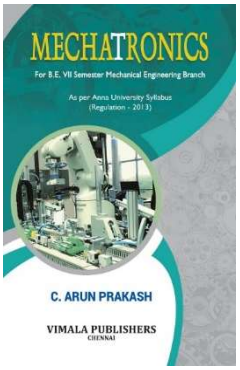
  Category – U21 – WINNER

  Open Men’s Singles – RUNNER

S. Arun (3rd Year, Mech) has been selected to represent India in the Asian skating Championships this year. He has attended a training programme in Portugal (16.7.18 to 2.8.18)

Book published

C. Arun Prakash, Assistant Prof, Published a book on Mechatronics(Anna Univ Syllabus) [05.08.2018]
This book has been designed to meet the syllabi requirements of the Mechatronics course of Anna University, Tamil Nadu. This book begins with the introduction to Mechatronics and lucidly explains topics such as sensors, actuators, microprocessors, microcontrollers, PLC and also discusses some mechatronics case studies.



Key features:

- Clear and comprehensive presentation of the subject in simple language
- Review questions including multiple choice questions at the end of each chapter for testing the understanding of the concepts.
- Numerical problems for easy understanding of the concept
- Appendix containing solved university two mark questions
- Model question papers based on the new Anna University pattern

Faculty Write up

Graduation Day address by Dr.M.K.Surappa, Vice Chancellor of Anna University.

Prof.VeA writes….

The eighteenth graduation day of SSN College of engineering was conducted on 25-8-2018. Prof.M.K.Surappa, VC of Anna University, addressed the gathering and awarded the degrees.

- I am pleased to be here. This is a momentous day for you. On this day, the contribution of the faculty to your growth is to be remembered. You are here because of the dedicated efforts of your faculty in imparting education to you.

- After receiving your certificate and taking pledge, you are starting your life in a new and dynamic environment. The lessons you have learnt inside and outside college and from your friends need to reflect upon your future career. How brilliant it can be.

- You have to look at how effectively these leanings can be used to manage opportunities and professional challenges in the governance, in education changes and in your future. We have to collectively look at how to change the future of our Society. With the experience you gained in both curricular and extracurricular activity in such a world class ambience, you are expected to be a good citizen in transforming India.

- The admission provided to the rural students in your Institution is a noteworthy contribution. My heart blossoms when I hear that the rural student who was a first generation graduate, has been selected by Dow Chemicals for placement. This is because, I am also from a rural school. It is heartening to see what this management is doing for the cause of education.

- The way we live and changes in technology, are all interconnected. You are privileged to come to life after all these disruptive technologies have come up. You are fortunate to witness these. This new world has also opened up many challenges. You have acquired digital world education much better than how many of us acquired over the years.

- In life, you may take up several positions in good sectors, become a Scholar, create your own start up and become an entrepreneur. Whatever you do, you have a great responsibility to see how to raise the living standards of our country to a better level.

(Photo courtesy S.M.Arun Prakash)

- The challenges the world faces now are new. We might have solved the old challenges. We are now a powerhouse of software. Education has been privatised to reach the masses. You have a larger role to bring in innovative solutions. Not only IITians -even you can equally contribute to solve problems of our country.

- You have learnt from various disciplines- like sensors, medical improvements, nano materials etc which are now all very advanced. These have helped in wiping out all old problems. Now, we have new sets of problems like natural disasters. Now we need rapid action to rebuild life after such disasters. You have to come up with a plan on how to use technology for such new challenges. Even when antibiotics wiped off all old diseases, we have new disease due to long use of antibiotics.

- The way in which engineering education has changed, should enable interdisciplinary work through people like you. Particularly, when climate change causes enormous damage, interdisciplinary and multi-disciplinary approaches may be needed to find a solution.

- Our life styles are now dependent more on energy and so, we need to generate more energy. Efficient solar energy conversion and its connectivity to grid are real challenges. Energy from fusion, managing clean water, nitrogen cycle for agriculture are all technologies that are needed. Providing drinking water from other sources like sea water, reused water etc are all very important.

- Urban infrastructure has to be improved. You must learn to participate in offering such technological solutions to the urbanites. In today's world, literacy is not merely signing- but it is the ability to use digital equipment. You should develop apps so that urbanites can access high technology through their regional languages. For example, apps can be available for getting info on agricultural inputs. Your way must be to look out how to percolate high technologies like Artificial intelligence and big data into the lives of rural people.

- Use big data to analyse heterogeneous traffic and erratic power and attempt to make rural peoples' life uninterrupted and seamless. Advanced health informatics needs a lot of data handling. You may do a reverse engineering on brain and its working. How to regenerate neurons may help us to help disabled people.

- Recently, there has been a case of an arts graduate developing a method to detect epilepsy at an early stage. So, understanding the problem and developing a solution comes out of passion, not necessarily by qualification.

- We need to look at security in the cyberspace, where lots of money has been lost. There are lots of security threats in the usage of cyberspace.

- We have seen that more discoveries lead to more issues. Therefore, there is no end to discoveries. Understanding and tools give new solutions. Now that there are many new tools, your understanding can lead to better solutions. You may also develop new tools.

- Specific to India, Govt has come up with various schemes to make lives better. For example, there are challenges in healthcare, like Child mortality. We might have sent rockets to space successfully, but the average life of people in rural area is still poor.

- We need Technological solutions for infectious diseases. With growing population and shrinking land space, more advances are needed in agriculture and in improving nutritional levels. This needs an ability to handle complex problems in a multidisciplinary way.

- Biomedical imaging can be applied for crops to understand the nutrition needs of the crop. We need enthusiastic new generation of leaders, who can generate solutions for Society centric problems.

- What we face is not a shortage of talents, but poor governance. When something goes wrong, you have to stand together and correct it. We cannot remain silent , when something around us, is not right. Change the system by taking a little risk and a little challenge. Move towards a "Contented Society". Finding solutions is your responsibility. Technology must reach the last man in the Society.

- Trust in Society is fast eroding. Whatever you do, do it in a trustworthy manner. Discuss openly, and get solutions acceptable to all.

- What we need is Transformational Leadership to learn to use our learning for the society with indomitable spirit, to make India better.

- You have many role models like Dr.Homi Baba and Sir CV Raman. It is difficult to find such role models in the present times. Learn from such role models.

- Let us learn Values and ethics from Scientists and Philanthropists. Remember them daily.Their life is an inspiration.

- Life is made not by what we get, but by what we give. All the best.

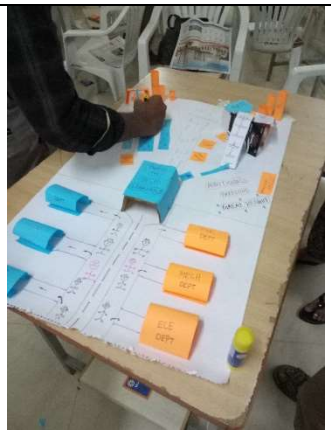
Faculty Write up

Dr. SSK writes…

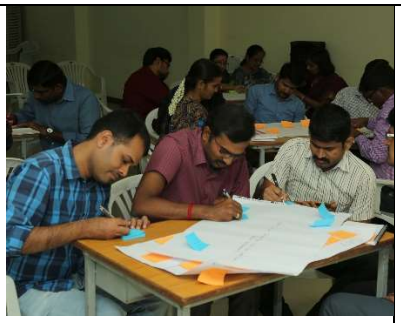
PhD Seminar Presentation by Scholars of Dr.S.Sureshkumar

1. Mr. S. Dharani Kumar (part time research scholar) has completed the PhD seminar presentation titled “Numerical and Experimental Ballistic Performance of Magnesium (AZ31B) Welded Joints” on 28th August 2018.
2. Similarly, Mr U. Magarajan (part time research scholar) has completed the PhD seminar presentation titled “Experimental Study on Ballistic resistance of AA6061-B4C surface composites produced by friction stir processing technique on 28th August 2018.

Design Thinking Workshop



Prototype fabrication



Faculty Write up

Dr. S.Suresh Kumar writes….

Design Thinking

Dr. S. Suresh Kumar has attended two days (26-27 July 2018) workshop titled **"Design Thinking for Engineering Educators"** at CIT Coimbatore. The program was organized by Teaching Learning Center (TCL) of CIT, Coimbatore. Dr. Vinay Dabholkar, guest faculty of IIM Bangalore and IIT Bombay has conducted the entire sessions. The workshop mainly focused the importance of New and smarter ways of learning methodologies for educational institutions.

About Dr. Vinay Dabholkar

Dr. Vinay is an independent consultant and for the past decade he has been helping organizations foster a culture of innovation. His clients include Oracle, Adobe, Tech Mahindra, Kotak Mahindra, Titan, Airbus etc. He also works with not-for-profit organizations like Agastya (school education) and Orbis (healthcare). He is a co-author of the book "8 steps to innovation". He has been an Adjunct/Guest faculty at IIM Bangalore and IIT Bombay. In the past few years, he has been researching on cognitive illusion and its relationship with creativity and mindfulness. Prior to starting the consulting career, Dr. Vinay worked for a decade in Motorola in US and Sasken in Bangalore. He did his B.Tech. from IIT Bombay and PhD from SUNY Buffalo both in Computer Science.

Design Thinking - Brief

Design Thinking is an iterative process in which we seek to understand the user, challenge assumptions, and redefine problems. This is a conscious attempt to identify alternative strategies and solutions that might not be instantly apparent with our initial level of understanding. In the present scenario, where there is growing complexity and ambiguity, change is the only constant factor and education sector is also embracing the changes. New and smarter ways of learning are replacing the conventional learning styles. Design Thinking is adopted by many educational institutions to create a better Teaching –Learning Experience to their educators and students. In all levels of education today there are Project Based Learning, Active learning, Experiential Learning and Student Centric Teaching practiced to improve the learning experience. Educators can apply Design Thinking to improve their work and to provide better learning experience to the students they teach. The design thinking process covered in this program enables participants to understand the potential of interdisciplinary collaboration for co-creation of new solutions to complex problems.

Design Thinking Workshop - Team

Faculty Write up

Industrial Interaction

-Dr. N. Lakshmi Narasimhan, Associate Prof/Mech

Post getting an MOU signed between SSN and M/s Preethi Kitchen Appliances Pvt. Ltd., Chennai there have been couple of interactions with the company as student internship, student projects, faculty joint projects and so on. In line with the activities, Dr. N. Lakshmi Narasimhan initiated for a joint R&D project with M/s PKA Ltd. on improving the performance of LPG gas burners. The project had another faculty member Dr. S. Somasundaram to collaborate with. The company was happy to have students included in the project under the supervision of the two faculty members at SSN. Acknowledging with thanks the consent from Mr. N. Sivasankaran, General Manager (Product Development), PKA Ltd., on including our students, Dr. NLN formed a team of seven students from III Year Mech of our college to contribute in the design of efficient LPG burners.

On Aug 28, 2018 the members of PKA Ltd. Mr. Sivasankaran and Mr. K. Sasikumar, Manager (Product Development), PKA Ltd., visited SSNCE to have a technical discussion and review the designs of novel LPG burners made by the students. Dr. NLN started his presentation based on the recent findings of the CFD analysis carried out by Mr. Neil Ashwin Raj (Final Year) on a burner developed by the company. Neil Ashwin Raj was also invited to make a presentation on the geometric and flow modelling he had carried out. Followed were the detailed presentation of the designs of novel LPG burners made by the student team. That was heartening to see all the seven members presenting their individual designs before the panel. Mr. Sivasankaran was in all praise for the enthusiasm and commitment of the students shown and assured all support towards fabrication and testing of the proposed burners in the factory premises. A final conclusion on the action points with time lines was shared by Dr.NLN.

Post the design review, a technical discussion happened with Dr.Somasundaram and the industrial panel members on his experiments carried out on an LPG burner given by the industry. The seven students have been formed into two groups to work under the guidance of both Dr. NLN and Dr. Somasundaram. The students have been invited to visit the factory on 31.08.2018 (Friday) to discuss and freeze the geometric parameters of their proposed design. It is hoped that the industry interaction would become strong and healthy with the support and encouragement received from both SSN and PKA Ltd. Our sincere thanks are expressed at this point to both SSNCE and PKA Ltd.

List of Student Members:

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Neil Ashwin Raj
4th Year</td>
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Suraj Jacob Chandy
3rd Year</td>
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Shibin.P
3rd Year</td>
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S.Shriram
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L.Prasad
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Varun Narayanan.J
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Gautam S Nair
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R.Vigneshwaran
3rd Year</td>
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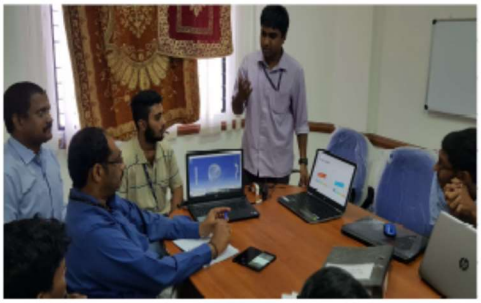
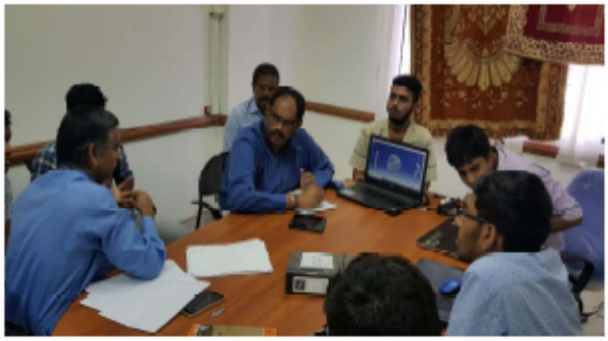
Excerpts of the meeting held with PKA:





Faculty Write up

Joint Certification Programme
on
"Drone Design Development and Applications"
at SSN

Dr. NLN writes…

Become a Drone Expert !!

SSNCE has recently signed an MOU with Barola Technologies (Chennai) for conducting Joint Certification Course on Drone Technology. The focus is on Drone Design Development and Applications and what is offered in the course is the essential theory and *Hands-on Experience* with practical building of a drone and its flying/testing.

"Barola Drone's Certified Drone Course in association with SSN College of Engineering offer an opportunity to practically experience engineering concepts through interdisciplinary training, harness industry required skills sets on Drones. Drone/Unmanned Aerial System industry is the fastest growing in Aerospace sector. Drone/UAS global Industry is estimated around100 billion Dollars. Drone/UAS (Un-manned Aerial Systems) industry in India is also growing at a rapid rate and finds a lot of potential applications, for various activities such as Military and civilian applications, surveillance, Disaster Management, Media- coverage, Movie shoot, mapping, surveying, inspections, crop management, and other industrial applications.

Drone Technology is expected to create a huge employment opportunity in developing countries like India. To leverage the opportunity, Barola Drones in association with SSN College of Engineering has launched a first of its kind certification training program for engineers and aspirants for their career prospects. The mission is to make sure that each student is capable and well versed in all elements necessary for safe and productive flying of Drones."

Course duration & Commencement: The Course is offered as a 5-day programme and conducted throughout the year batch wise. Aspirants can join under any batch as per their convenience. The Course is scheduled to commence from mid September 2018.

Drone enthusiasts are encouraged to visit *www.baroladrones.com* for more details.

Very Recently GoI has announced that Flying Drones in India to be legal from December 2018 in accordance with DGCA Regulations.

Interesting! Right! See you all there in the programme!!

- Coordinators for the programme: Dr. V. E. Annamalai, HOD/Mech and
Dr. N. Lakshmi Narasimhan, Associate Prof/Mech

Faculty Write up

Report on 2-day workshop in Veltech University, Avadi

-Dr.D.Ananthapadmanaban

A 2-day workshop was conducted at VELTECH University, Avadi on 10th and 11th August,2018. New advances in welding were discussed. The first lecture was given by Dr.G.D.Janakiram, Professor, I.I.T, Madras. He talked about the transition from friction stir welding to friction stir processing. He introduced some new terms like friction buttering and friction stir processing with high entropy alloys. This is a very interesting idea- a combination of solid state welding and nanomaterials.

The next session was conducted by Mr.Ananthan, retired from WRI,Tiruchi. He spoke about the importance of thermal spraying. Application of sprayed coatings, methods of spraying, advantages and disadvantages of each of the coatings were discussed. Mr.Ananthan also expressed his willingness to interact with SSN College and share his expertise.

The second day started with a lecture by Mr.Sasi Anand Parthasarathy. He spoke about Lithium ion batteries and inverter systems used in welding. He represented Fronius, Austria ,which is a world renowned name in DC Power supplies and lately is also making Cold Metal Transfer machines for welding.

Plasma arc welding and the physics behind it was the theme of the talk by Mr.Balasubramaniam, OmPlas Systems. He explained that his company was working in tandem with IGCAR for performing high quality welding research. He pointed out that each type of weld and material combination was a challenge and a lesson in itself. Last, but not the least, the final lecture was given by Dr.Jerald, Assistant Professor ,NIT, Trichy. He gave a wonderful explanation of the basics of weld cracks, He talked about metallurgical aspects of crack formation, especially the Austenite to Martensite formation. The workshop served to give me new ideas for my research, make contacts with Industries and other academic Institutions.

Faculty Write up

Dr. B Anand Ronald writes…

Ph.D. Public Viva-Voce Examination

The Ph.D Public Viva Voce examination of my first Ph.D Scholar (S. Arokiasamy) registered under Anna University (Part Time) was held on **24.08.2018** at **10.00 am** in Seminar Hall of Department of Mechanical Engineering. The Indian Examiner was Dr. G. Rajamohan, Assoc. Prof., National Inst. Of Foundry and Forge Technology, Ranchi. The subject expert was Dr. A. Velayudham, Scientist–F, CVRDE, Avadi.

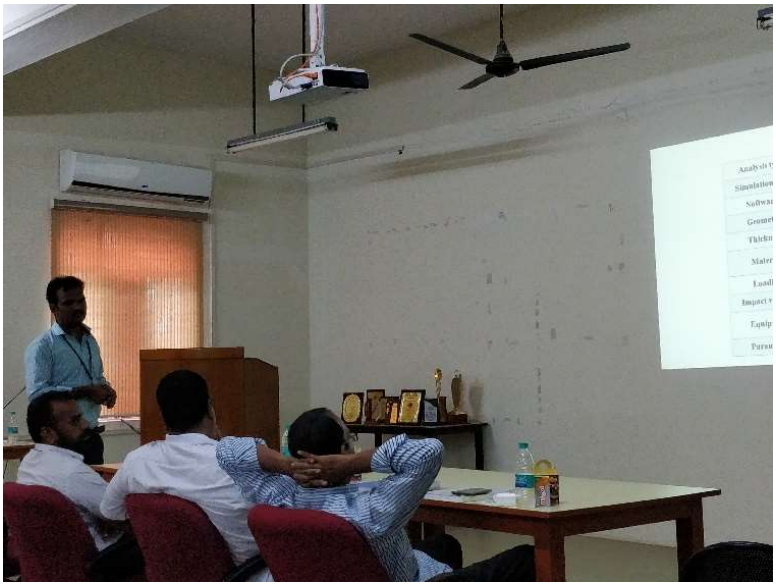
Mr. S. Arokiasamy during the Viva Voce Presentation

Faculty Write up

Dr.M.Nalla Mohamed writes….

Ph.D Viva-voce exam on 02.08.2018

Mr.A.Praveen Kumar, Full time research scholar (1514299713) under my guidance has completed his Ph.D Viva-voce on 02.08.2018. The title of the thesis is “Numerical and experimental investigations on the axial crushing characteristics of aluminium and composite wrapped aluminium tubes”.

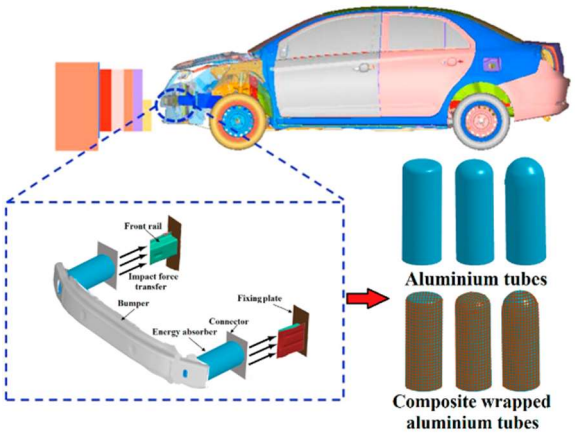


Dr.M.Nalla Mohamed
Supervisor &Convener

Dr.A.Arokiarajan
Indian Examiner

Dr.K.Panneerselvam
In place of foreign examiner

This research work mainly emphasize to mitigate the harmful effect of the impact energy released during collision of automobile vehicles by introducing the thin walled tubes made of lightweight aluminium and composite materials to safeguard the occupants. The outcome of the research would definitely helpful to the automobile industries.



His research work was evaluated by Dr.A.Arokiaraj, Professor in IIT-M and Dr.Mehat Mohamed, National Defence University Malaysia and received a positive comments from both examiners. Dr.A.Arokiaraj, professor in Applied Mechanics Department, IIT-M, Chennai and Dr.K.Panneerselvam, Associate Professor in Production Department, National Institute of Technology, Tiruchy, were the panel of experts for the oral presentation.

Faculty Write up

Dr.M.Nalla Mohamed writes…

Guest Lecture by Dr.T.R.Vijayaram, Director Research, Galgotia University

A guest lecture was arranged by Dr.M.Nalla Mohamed and Dr.Ananthapadmanaban on 14.08.18 for II Year 'A' Section and III Year 'B' Section students. The lecture was delivered by Dr.T.R.Vijayaram, Director Research, Galgotia University on the topic "Recent advances in Castings and their comparison with traditional methods".

Dr.Vijayaram started out with a brief introduction on conventional casting methods like Sand casting, Investment casting and Shell molding. He then explained about latest methods like gravity die casting, pressure die casting and centrifugal casting. He emphasized on the modern-day use and importance of continuous casting which increases productivity.
Dr.Vijayaram then shared his experiences of working in Malaysia and Italy .He briefed the students about the work culture abroad. He also threw light about the punctuality in Western countries and the eagerness to do advanced research. He talked about the advanced equipment available in western countries. On the whole, the lecture was well received by the students.

Student write up

Inspiring Research through Information Sharing (IRIS) - Techbee

Write up by Kavitha , SSN HCL Mechanical Techbee Scholar

Everyone in the world is learning every day. But many of us don't practice them. Applying what we learn makes us different from others. Practical learning helps us enhance our knowledge. Knowledge is a two-way path. It should be shared and learned. IRIS is an example of that. Our first class of IRIS started with four innovative mechanical students of SSN who invented the safety precaution bumper and automated top cover opening for cars. This motivated us to be innovative in order to be unique.

IRIS Session– A.K.Lakshminarayanan

Our next IRIS class was handled by Dr.A.K.Lakshminarayanan, Professor of Mechanical Department who has done his PhD in Welding. As soon as he entered our classroom he became one of us. He cleared all our doubts. He showed us many videos related to our subjects. It was a very efficient way to master a topic. We are indeed very lucky to have been addressed by him. TECH BEE students are very lucky to hear and gain knowledge from him. He made the class very interesting and interactive. He kept us on our toes by answering all the questions and posting questions to us. IRIS hour always refreshes our minds and makes us think beyond what we can actually do. In SSN we are able to learn through different methods and IRIS plays a major role in it.

Write up by Jeeva, SSN HCL Mechanical Techbee Scholar

We got a chance to attend the seminar of material technology expert Dr.A.K.Lakshminarayanan sir. He has a lot of experience in the welding field. The seminar of Dr.A.K.Lakshminarayanan was an extraordinary way to learn. It included a seminar on material technology and welding process. A.K.L sir gave a brief explanation on the process and compositions of different metals.

We were very excited after seeing him in our class room. He may be simple in his outward appearance but his brain is filled with information and facts. He made the class very interesting and interactive. He is very good in adapting to situations. As soon as he entered the classroom he made my classmates more energized. He has vast knowledge and answered all the questions we asked. He helped us

score good marks in our internal assessments. We are enjoying all the facilities in SSN College especially the environment, sports facilities along with gaining knowledge from experienced teachers.

IRIS Session – II– Dr.G.Satheeshkumar

Write up by Prem Anand.T, SSN HCL Mechanical Techbee Scholar

90's World said that "Future is computer" and the present world is saying that "Future is robotics". As we are the students of mech-automation, robotics is a crucial part of our programme. In the course of our journey to learn robotics we met "Dr.Sathish Kumar" sir in our IRIS class who has done a Ph.D. in robotics.
He gave us an idea about the basics of robotics (like arduino etc..) and the basic requirements to program a robot. Then he introduced us to his sewage robots which has an amazing design and whose function is to save the life of men.
After a small break he showed us his "four side freedom stool". He also invited us to participate in a robotics workshop. I hope that day will come soon.
We hope to meet Sir again!!!

Student write up

A write up by Team Precisio

National Superkarting Championship
Team Precisio-Virtual Round Report

Team PRECISIO representing SSN COLLEGE OF ENGINEERING participated in the virtual round of National Superkarting Championship held on August 17, 2018. National Superkarting Championship 2018 was organized by SR MotorSports (Registered to MSME, Govt. of India) in Ujjain, MP.

Around 40 teams from all over India participated in this virtual round. SSN team bagged overall runners-up of the virtual round and also in the design presentation event.

The student members who participated are Karthick.R, Rahul.B, Saran Prasanth R.R, Pranaav Sankar.S, Anupa Sri, Harish.A, Rakesh Kumar from 3rd year Mechanical and Ricky Martin R from 4th Year Mechanical.

The participating teams are judged across two rounds: Virtuals and Final Round.
The Virtuals is the stage in which documents like Vehicle Design, Design Report, FMEA, DVP and the Cost Report are evaluated by the judges followed by a presentation and interview of the team representatives. We were also

asked to fabricate a prototype. The members of the team worked for a week to analyse, calculate and create reports along with a presentation. We also made the prototype of the go-kart vehicle to present in the Virtuals. The Final Round will be held at Hyderabad in October, 2018.
The event organizers appreciated the prototype we fabricated.

Team Precisio whole heartedly thanks our mentor Mr. B. Jayakishan (Assistant Professor, Mech) for his valuable guidance and support.

Student write up

Placement Write-up (Caterpillar)

-Ankit Kumar

4th Year Mechanical 'A'

I got placed in Caterpillar last week and I am writing this to share my experience during the placement process. I hope it would be of some benefit to other students who are eager to work in a core company such as caterpillar.

The first round was a technical test. It is not necessary to score full marks or answer all the questions to clear this round. Therefore, I only focused on solving as many questions as I can in the given period. I allotted 20 seconds for each question and if I was unable to think of an approach to solve it, I simply skipped the question and went to the next one.

Some key points are - Avoid spending a lot of your time on a single question. Try solving questions in the reverse order. Even after this, there was a shortage of time. It was with difficulty that I completed the test.

I would advise everyone to prepare for GATE. It gives you a different perspective that is helpful while approaching problems. I am preparing for GATE, so I had a good command over the problems and the required technical knowledge to clear this round. Going through the complete syllabus may not help you, so try going through the important topics for GATE. Fortunately, these topics also fulfil the placement requirements. Also, I would suggest planning your preparation in such a way that you spend a lot of time solving problems, rather than learning continuously without practicing questions.

My GD topic was "Latest Trends in Mechanical Engineering". Every issue of ASPIRE has a column called "MECH MARVELS" which consists of the recent trends in mechanical engineering. This helped me in clearing the GD round. I would like to thank Dr. V. E. Annamalai Sir from the bottom of my heart for his efforts in compiling information for ASPIRE. I recommend everyone to go through ASPIRE once. It is very informative.

The next round was a core technical interview, where they expected you to be good at Problem Solving in general, Strength of materials, Design, Finite Element Analysis, etc. They were also interested in my projects. In the end, two-three HR interview questions were also asked.

The following is a list of questions I was asked in the Interview round.

- Tell me about yourself.
- Describe your projects. (Lot of questions from projects)
- Describe your patent work. (since I had one)
- You have two engines, one of steel and another of plastic, exhaust gas at 500°C is coming out of it. Which engine will have more stress if 10KN of force is applied on both engines.
- Difference between Engineering Stress-Strain and True Stress-Strain, with a graph.
- Explain the stress-strain graph describing each point.
- What are your other areas of interest?
- What is the section modulus, explain its significance in designing?
- Have you ever worked with an analysis software?
- What is the difference between Ansys and Abaqus?
- Where do you want to see yourself after 5 years?
- Would you like to go for higher studies?
- Where do you want to work for our organization?
- Any questions from your side?

Notes:

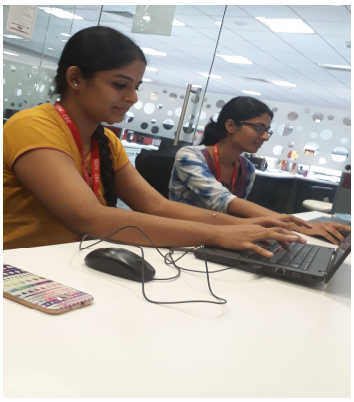
- Be well prepared, do your homework properly.
- Take your file with the documents listed in your resume' in the same order.
- Take a few rough sheets, pen, pencil, and eraser with the file.
- Try answering with diagrams in the technical interview. (It gives you a big boost)

Student write up

Placement Write-up (Dow Chemicals)

-Namratha G

4th Year Mechanical 'A'



My 8-week internship at Dow Chemical Company was closely followed by a pre-placement offer. I would like to share details of the process involved in converting the internship to a Pre-placement offer and what helped me convert this internship programme to a potential career opportunity.

For the internship programme, 24 students were shortlisted from SSNCE, departments being Electrical, Civil and Mechanical. After a technical and an HR interview 6 students were selected for the two-month programme. In all, we were 12 interns from colleges namely MIT, ACTech, IIT-M and SSN. These two months were packed with cross-discipline interactions, department specific training, live projects, presentations at different stages of the project via WebEx meetings and an industrial visit. The internship ended with a two-day event called Pro-thon which consisted of tasks exclusively to test the candidate's level of competence. Finally, we had to present a summary of our project and share our overall internship experience to an 8-member panel that consisted of Resource Leaders (Department heads at DOW) from all disciplines (Civil, Piping, Process Containment Equipment, Electrical, Instrumentation) and the HR Lead.

Of the interns from SSN, Pre-Placement Offers were offered to three students. The overall conduct during the internship, level of commitment towards the assigned tasks, performance in the final presentation and the Pro-thon activity along with very good communication skills helped me convert the internship to a pre-placement offer.

Student write up

Placement Write-up (McKinsey and Company)

- Arvind R

4th Year Mechanical 'B'

I recently got placed in McKinsey and Company for the role of Junior Research Analyst.
I would like to share my experience with the placement process. Unlike any other company, the recruitment process of McKinsey is quite different as it consists of one preliminary problem-solving test (PST) followed by a series of case interviews and behavioural interviews.
It is extremely important that one is well prepared before attempting the PST. Practice papers and study materials are available in the company's website for reference. I did around 5 days of preparation and took three mock tests.

I was one amongst the 45 students who were shortlisted for the case interview round. I was given actual real-life problems involving market research, mergers and acquisitions etc. This can easily be answered with a certain degree of general business knowledge and statistical abilities.

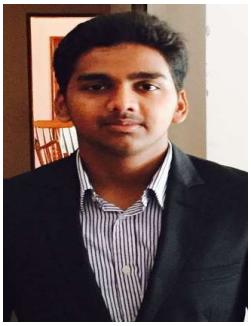
Out of the 12 students shortlisted for the final round, I was one amongst the 5 to be placed. The final round involved behavioural interviews apart from another set of case interviews.
Things you must know and brush up:
Guesstimate problems
Statistics
Current affairs
Tips:
Stay confident
Do not panic, maintain your cool in stress situations
Be honest

Student write up

Placement Write-up (MuSigma)

- Akash Koundinya, Salavadeshwar H

4th Year Mechanical 'A'



I'm Akash Koundinya from Mechanical Engineering and I got placed in MuSigma, which was one of the first companies to come to our campus this year. The role was that of a data scientist.

The first round was an online psychometric test conducted in the campus that consisted of questions that tested our quantitative aptitude, verbal skills and questions that were aimed at understanding our personality. 542 students took the test out of which 60 were shortlisted for the next round in Bangalore.

The second round was a group discussion (GD) session on general topics. I was given the topic 'speed vs velocity'. The idea behind a GD is to test your communication skills and understand your flow of thought. Performing well in the GD also shows confidence and exhibits a healthy attitude.

Elimination was done again, and I reached the final round which was a face to face interview. The interview was intended to test how well we would fit into the company and to help in understanding whether we would get accustomed to the working culture within the company.

Also, a company tour was arranged to show us about the working of the company, their culture and to help understand some case studies.

I'm Salavadeshwar H from Fourth year, Mechanical Engineering and I got placed in MuSigma. I cleared the first round conducted in the campus.

For the second round, my group was told that we had to provide inputs to NIKE USA to set up a base in India. This type of group activity is aimed to test our communication skills and flow of ideas. Moreover, it is necessary that one is confident while putting forth his/her ideas and opinions. How you react and respond to suggestions made by your group members plays a major role in clearing this round. It is also important to lead the group and direct the discussion so that the discussion covers major points and is not stuck over one small issue. A lot of practice is required to perform well in this round.

The final round consisted of interviews. I had two sets of stress interviews. So, I was told I wouldn't fit in the company and that my answers to their questions were unconvincing. In such situations, it is important to not panic and to exhibit perseverance.

In all, 19 from SSN got placed in MuSigma.

Tips:

Never ever give up
Be positive
Don't get stressed out
Be yourself

Student write up

Placement Write-up (ZoomRx)

- S. Deepak

4th Year Mechanical 'B'

I have been offered the role of Business Associate at ZoomRx. The interview was a five-step process. First round was the Online test which had 3 sections namely Numerical aptitude, Logical reasoning and verbal ability. Then we had a Group Discussion for which we were split up into groups of eight. The topic given to us was "Are bullet trains necessary for India now ". We were given enough time to prepare and at the end of the discussion, the panel insisted that each of us mention at least two statements both in support as well as against the topic. Then there were two technical interviews and a HR interview. In the first of the technical interview the interviewer gave me 3 to 4 puzzles to solve. Then he asked me about my interests apart from academics. I expressed my interests in cricket and movies. I was asked some questions regarding current scenarios in cricket. Then the panel asked me to arrive at a comparison between Hardik Pandya and Kapil Dev using different statistics. They were keen on the different parameters I used to compare the two players and the approach I took to solve the given problem. Then I was asked to devise a strategy to improve the food menu at SPI cinemas since I had mentioned movies as one of my interest.

In the second technical interview I was again asked to solve 3 more puzzles and then given a case study on how to improve the profitability of a DTH service provider considering different factors. They were keen on the approach I used to solve the issue rather than the solution itself. The last round was the HR interview. The questions were very straight forward and generated from my resume. I was expected to explain the content of my resume and justify the data listed in it.

Overall it was a very friendly and positive interview process throughout. The interviewer even suggested ways to solve the problem at times when I got stuck. For everyone who aspires to be a part of any management or data analytics firm, make sure you develop your aptitude, build good communication skills and know your resume well. Try to learn about the company's interview process from various sources and prepare in-specific for the company. I hope this would help everyone who wishes to take up management and data analytics as a career.

Student write up

External Recognition

National Champions of Silambam

A write up by K. Gokul, 4th Year, Mechanical

The journey started when I was studying my 11th standard in Elite Matriculation Higher Secondary school where we used to have weekend classes on Silambam. My master and mentor, Mr. Parthiban, found both talent and interest in me and my team members. Just as our late president Dr. APJ Abdul Kalam said "A student can be identified moulded and grown as a great person just by one good teacher" my teacher identified me and nurtured my talent by recommending me to Dr. David Monuelraj. He denied any form of fees considering my economic background and was a great means of support. He is thus, able to encourage a lot of poor patrons of the art of Silambam.

I was appointed the captain of our team and we were learning, mastering and improving our technique. We went for the division tournament of Kancheepuram and Thiruvallur during my 12th standard and I won gold and silver medal for different competitions

Then during the 'All India Silambam Premier League', seven of us participated in the national competition and as captain I won the first place and our team became the national champions in Silambam league. We had the privilege of winning a cash price of Rs. 7000. The validation ceremony was preceded over by chief guest M.L.A,Alexander and Actor Nashar.

As a dignified student inspired by my teacher Mr. Parthiban, I wish to pay tribute to my art by teaching the art to deaf and dumb children. I hope that my dream comes true.

Student write up

A report by Neil Ashwin, 4th Year, Mechanical

Aero-Glider Workshop

The Aero Club organised Glider Workshop on August 25(Saturday). The workshop began with an interactive session between the instructors and the students. Siddharth explained the basic components of a commercial aircraft and cited out some important differences between a glider and an aircraft. Then I spoke about the common misconceptions about how an aerofoil generates lift and a few other fluid mechanics phenomena pertinent to aerospace. Further, Sekkapan talked about some competitions held by the IITs and NITs for aerospace aspirants. He narrated their experience at the RC glider contest conducted by Boeing in collaboration with IIT Madras. He elaborated on the costs involved to take part in the competition and other technical aspects involved in designing a glider.

The students were then led to the Drawing hall were the fabrication phase of the glider began. Everyone was

provided with a plank of balsa wood, super glue, a paper cutter and other basic drawing instruments. Before the fabrication phase Siddharth explained the basic outline of the glider and how to cut the wood as per the required dimensions. The instructors were available to provide any assistance to the students at the time of the fabrication process. Special care had to be taken especially while sticking various components of the glider together. Once the fabrication was completed the glider were inspected by the instructors to check for any blemishes or any final changes that had to be made.

The instructors and the students finally moved to the ground near the tennis court to test out the designs and begin the competition. The competition consisted of three rounds. In each round the students were asked to fly their glider in a direction and correspondingly three different times were noted separately. The winning glider would be the one that remained air-borne for the longest time. The best of three times was considered. The winning glider remained air-borne for 6.25 seconds. The runner-up held flight for 5.75 seconds.

The workshop was a great platform to share our knowledge as well as discuss our ideas with the students.

We thank **Dr. K.S.Vijay Sekar,** Asso.Prof/Mech for the valuable guidance and support.

Mech Marvel – 45

Ammonia-derived hydrogen fuel road-tested

Hydrogen may be the zero-emission fuel of the future, but transport and storage has always been a head-scratcher. Highly flammable and difficult to ship due to its low density, the logistical issues have always stood in the way of progress, until now. Australia's Commonwealth Scientific and Industrial Research Organisation (CSIRO) has road-tested its ammonia to hydrogen technology for hydrogen fuel-cells in two purpose-built hydrogen-cell cars.

The CSIRO team at the Pullenvale Technology Hub in Brisbane, Queensland, developed a metallic membrane that separates hydrogen from ammonia, while at the same time ensuring the hydrogen is of an ultra-high purity by blocking other gases. Effectively, the process is a reversal of the Haber-Bosch process, used to transform hydrogen into ammonia. In this instance, the CSIRO team takes nitrogen (N) out of the air and makes ammonia (NH_3). The idea is that the resulting ammonia would then be shipped to the refuelling depots where the hydrogen is extracted via the membrane in a fairly low-energy process.

A Toyota Mirai fuel cell vehicle, ready to be fuelled with CSIRO-produced hydrogen

The technology has huge potential for the export market as ammonia stores almost twice as much energy as liquid hydrogen, while being far easier and safer to ship. Though hydrogen cars could potentially enter the Australian market in as little as two years, Asia is where the team – and Australia's resources industry – is looking just now.

This is the very first time hydrogen cell cars have been fuelled with hydrogen derived from ammonia and CSIRO Chief Executive Dr Larry Marshall was one of the first to take a test-ride. The team used a Toyota Mirai and a Hyundai Nexo, and both companies have made considerable investments of time and money in the future of fuel-cell cars.
"This is a watershed moment for energy, and we look forward to applying CSIRO innovation to enable this exciting renewably-sourced fuel and energy storage medium a smoother path to market," says Dr Marshall. "I'm delighted to see strong collaboration and the application of CSIRO know-how to what is a key part of the overall energy mix."

CSIRO plans to scale-up the technology and deploy it in a number of larger-scale demonstrations both in Australia and overseas.

Read more: New Atlas

Corporate Story 45

MSME FOCUS

ASHOK ENTERPRISES

Ashok Enterprises is a manufacturer and supplier of aggregates (blue metal), chamber bricks, river sand, Hollow and Solid Blocks, Paving Blocks, Concrete Bricks, Designer Tiles, Tile Pavers and road work materials\

As on their website:

Ashok, proprietor of the company has in-depth knowledge and experience in the field. The major strength of the organization is the proprietor and is backed with three of his brothers. The Company is managed by talented and dedicated Professionals.

Head Office : Our Concern M/s. Ashok Enterprises, located at No.4/67, Balakrishnan Naicker St, West Mambalam, Chennai 600033, Tamil Nadu, India.

Working Culture : Our office staff strength includes well qualified working professionals which is divided in to various separate departments, which includes Purchase, Sales, Collection, Income Tax, Sales Tax, Reconciliation, Billing & Legal.

Manufacturing Unit:- Our Quarries, Crushers & Concrete Blocks Units - Situated at (1) Mathur, (2) Oragadum & (3) Dindivanam.

Plant & Machineries :- Our Plant equipped with 3-Stage Cone with VSI, 200 TPH Plant (Metso), world's most modernized Machine Brand. We have a Fly Ash fully automated steam curing Block Manufacturing Plant - QFT10-15 Block Making Machine (Based Line) – QUNFENE Brand(Imported) in the same location for using the by-products from the crushing plant.

Quality Control:- We have Our own ISI standard quality department at our Manufacturing Unit.

Within a short span of time, we have successfully established our grip over a major share of market owing to our dedication and commitment to the clients. Our exclusive and wide product range is the result of years of perseverance and focused quality efforts. The series of tests are performed at various levels so as to ensure the quality of the products delivered to the customers.

Throughout our rapid growth, core values have remained constant: honesty in decision-making, personal responsibility and accountability, and leadership by example.

These principles are at the heart of our ability to create and respond to opportunities and have fuelled our growth.

If interested to work contact through support@ashokenterprises.in

Amazing Innovation- 81

Pine cone-inspired sunshades open and close without electricity

Retractable sunshades have long been used to adjust the amount of sunlight an area gets during the day, but these are usually driven by motors. Taking inspiration from the humble pine cone, engineers at ETH Zurich have now developed a shading system that can open and close automatically – no electricity required.

In order to release seeds at the most opportune time, pine cones open their scales in warm and dry weather, and remain closed and sealed up when it's cold and wet. The natural mechanism behind this is clever – the scales are made up of two connected layers with fibers running perpendicular to each other that lets them contract as the air around them dries, which pulls the cone open.

The system consists of planks made with two layers of different wood – spruce and beech. These wood samples have been cut and joined so the grain of the spruce layer runs in one direction and that of the beech wood runs perpendicular to it. That mimics the pine cone structure, allowing it to bend in response to humidity.

Source: ETH Zurich

Amazing Innovation- 82

Supercool technique keeps liquids liquid well below freezing

Freezing is one of the simplest methods of preserving food, biological tissue and other perishables, but the formation of ice crystals can damage cells. Now, researchers from Massachusetts General Hospital (MGH) have developed a new way to "supercool" water and similar solutions to keep them in a liquid form well below the usual freezing point.

Everybody knows that water freezes at 0° C (32° F), but not everybody knows that the process isn't quite that simple. That's the point where the liquid begins to freeze, as water molecules at the surface begin to crystallize into ice, which spreads to neighbouring molecules until the whole body of water is frozen. In a sense, lowering the temperature just increases the probability that any given molecule of a liquid will freeze.

Knowing that the freezing process begins at the surface, where water meets cold air, the MGH technique is surprisingly simple – keep the water and air separate. To do so, the team sealed the surface with a hydrocarbon-based oil, and found that they could stop ice formation in a 1-ml (0.03-oz) sample stored at -13° C (9° F) for up to a week.

"Our approach, which we dubbed 'deep supercooling,' is simply to cover the surface of such a liquid with a solution that does not mix with water, like mineral oil, to block the interface between water and air, which is the major site of crystallization," says O. Berk Usta, co-corresponding author of the study. "This surprisingly simple, practical and low-cost approach to supercooling solutions for extended periods can enable many medical and food preservation methods, as well as fundamental experiments that were not previously possible."

Source: Massachusetts General Hospital

Amazing Innovation- 83

Feher ACH-1: Air-conditioned helmet cools biker

The Feher helmet is the world's first fully integrated air conditioned motorcycle helmet, and it claims to keep your head 10-15 degrees cooler than the outside world.

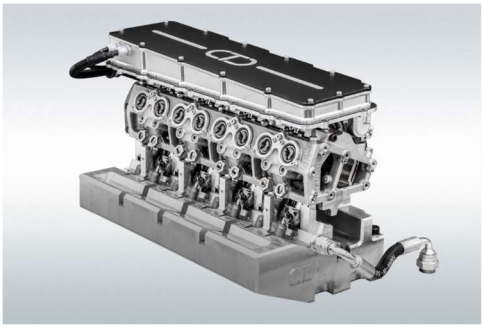
Feher invented the miniature air conditioning units used to cool the seats in Rolls-Royce, Bentley, Ferrari, Lexus and GM cars, and now he's stuck one in the back of a helmet to cool head.

There are no vents on a Feher lid. Much like car air-con systems, they work better when the outside air is kept out. A small thermoelectric pump at the back of the lid cools and dehumidifies air before pushing it out across the top of your dome. It's designed such that it's not a distracting or forceful feeling – "no headache," as Feher puts it – rather just a cooler environment for your bonce to be in that helps your whole body feel fresher. It also helps dry the air inside the helmet, giving a potential de-misting effect that could make this lid useful on cold days as well.

Source: Feher Helmets

Amazing Innovation- 84

World's first fully digital valves open up engine possibilities



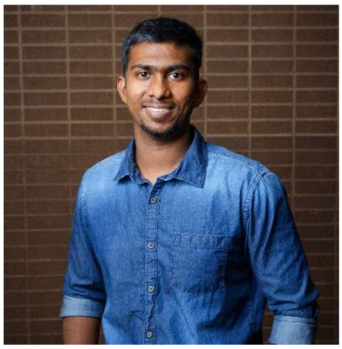
British company Camcon Automotive has built the first fully electronic engine valve system, uncoupled from the crankshaft, that offers unprecedented control over the combustion cycle. On top of power and emissions improvements, it also opens up some weird and wonderful capabilities we've never seen before, such as giving 4-stroke engines brief 2-stroke power boosts.

"What that means," says Camcon COO Mark Gostick from his Cambridge office, "is we can give the engine exactly what it wants at low revs, and exactly what it wants at higher revs, and anywhere in between, and you don't have to compromise at all. You can change timing, you can change duration, you can change lift, you can even shape the events if you want. You can do double events. You can change the profile of your camshaft between one event and the next. You can go from your idle setting to 100 percent throttle in one revolution. You can do pretty much anything. You've got what we like to call a digital crankshaft."

Source: Camcon Automotive

Alumni Update

Alumni Writeup -1

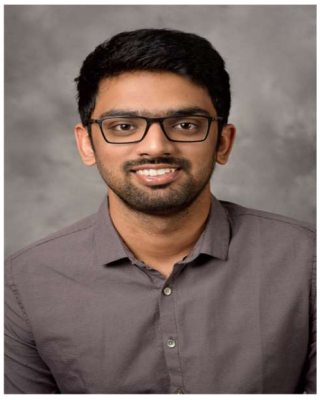


Sathianandan Dharmaselvan from the 2013-17 batch is currently pursuing Masters in Petroleum Engineering at **Colorado School of Mines.**

He writes:

“I'm working on a project on Drilling Optimisation & Odor Mitigation (DOOM). My word of advice would be to keep yourself updated with the trends in the industry and be flexible when it comes to your profession. Stop narrowing down your interest, develop the attitude to seek a broad knowledge across the table and this should help you in drafting a steep learning curve in your 20s. Improvise your networking and socialising skills. You would be surprised to witness the heights that you can reach with these.”

Alumni Writeup – 2



Adithya Vignesh from the 2012-2016 batch is currently working as a **Systems Analyst Engineer** at **Cummins** in Columbus, IN. He completed his master's degree in Mechanical Engineering at **Purdue University**.

He writes:

“My coursework was focused on diesel engine systems, thermodynamics and statistics. After completing my internship at Daimler Trucks North America in Fall 2017, I developed a strong interest in engine systems and data analysis. As a graduate student at Purdue, I presented a paper titled "Maximizing Residential Waste Heat Recovery" at an international conference TRIZCON 2018, held in May 2018. I’m currently working as a Systems Analyst Engineer at Cummins.”

Alumni Writeup – 3

Preetham Harinath 2012-16 batch

Preethan Ahrinath of 2012-16 batch, did his Masters in vehicle engg in KTH Royal Institute of Technology, Stockholm, Sweden and is now working as Function Developer at Volvo Cars, Sweden.

He writes on obtaining a Scholarship..

" ITRL is a long-term multidisciplinary research cooperation responding to global environmental transport challenges. I was a recipient of the annual ITRL summer scholarship. I had worked on building a state estimator based on a Kalman filter approach using a comprehensive mathematical model for the Research Concept Vehicle of ITRL, which is an autonomous over-actuated vehicle. "

He has done his Masters Thesis in Volvo cars.

In both academia and automotive industry, collision avoidance functions using active vehicle chassis control are being continuously and popularly developed. Advancement in the steering system makes it more feasible now to

assist the driver's evasive maneuver not only by braking but also by steering. When it comes to steering intervention, a common question exists: how does a driver react to extra rotational torque on steering wheel and how does the driver's steering behavior affect effectiveness and robustness of the whole Evasive Maneuver Assist (EMA) function? Currently Preetham is working on developing the vehicle dynamic properties of the 'Evasive Maneuver Assist Function'.

Since Aug 2018, Preetham is working as a consultant from New Professional Minds AB in the Vehicle Motion & Control department at Volvo Cars specialising in development and testing of Active Safety Stability functions.

Alumni Info 1:

Eshwar Raj KV of 2009-13 batch is now Senior Energy Analyst in Enpowered Solutions , Chennai. His work profile reads as below:
* Evaluating technologies and equipment to recommend energy efficient performance in Food and beverage processing, Educational Institutions and Hospitals.
* Determining energy baselines and calculating detailed operational and energy savings using spreadsheet models and building simulations.
* Co-ordinating with all energy auditors and preparing documents as well as taking corrective reports.
* Providing direction, instructions and guidance to graduate trainee engineer.

Eshwar Raj KV 2009-2013 batch

Alumni Info 2:

Joel Thomas Rathnesh of 2013-17 batch, is currently doing his MBA at IIT Delhi. He is also the Executive Member, Corporate Relations and Placement Committee, at IIT Delhi.
He has been Campus Ambassador at Shiksha.com since Sept 2017.
He was Commercial Sales Intern at HP during May 2018 – Jul 2018
He was Project Trainee at Bosch Sicherheitssysteme GmbH , Bengaluru, during Jan to March 2017.

Joel Thomas Rathnesh 2013-17 batch

Alumni Visits

Presence at the Annual Alumni meet (TRIBUTE) alone is not a measure of Alumni interaction with us. Alumni visit us regularly, as and when they drop in to Chennai. This is an attempt to capture data on their visit to our campus. This data will be provided monthly by C.Arun Prakash, faculty in charge of Alumni at Mech.- VeA

Diwakar of 2018 passed out batch visited the dept to meet faculty and appraise of his future plans and movements for higher studies. He has joined in TU Delft, Netherlands.

Vinay Srinivas and Amalraj (EEE) (BE 2017 passed out) visited us to interact with students providing guidance on the placement process for Freshworks and Latent View.

Annexure: Guidance from Tarun Subramanium (BE Mech, 2017 passed out) for MS aspirants

Forthcoming events

Workshop/FDP

September 2018

- Coimbatore Institute of Technology (CIT), is organizing a 5-day Faculty Development programme on "*Experimental Teaching & Learning in LabVIEW*" from 08th to 12th September 2018. During this five days' workshop, the participants will get hands-on training on industry-standard graphical system design software(LabVIEW).Register on or before Sept 4 at https://docs.google.com/forms/d/e/1FAIpQLSeHrhU187oSC9snfDJMqnv3-nSWexI5oHePMb8PC69j2NhhYg/viewform
  Queries at tlcp4@cit.edu.in

- Insights of Research in Welding Engineering and Additive Manufacturing 2018, Mepco Schlenk Engineering College, Workshop, Sivakasi on 14th to 15th September. The workshop will be conducted at Mepco Schlenk engineering college campus. This course will give deep perception of current situation available in manufacturing industries and R&D laboratories. Through this course, the participants may gain knowledge on introduction to welding, classifications of welding, advanced welding processes, applications of welding, and research aspects in welding and additive manufacturing in various organizations like Aerospace, Automobile, Biomedical, and Power Generation Sectors.

  Last date for registration: September 9, 2018

- International Workshop on Materials Technology and Applications (IMTA-2018) and Japanese Education Fair is conducted on 11-12 October 2018 at the Centre for Crystal Growth, VIT University, Vellore-632104, Tamilnadu. Submission of abstract: 15.09.2018. Kindly refer the Website: International Workshop on Materials Technology and Applications

October 2018

- IIT Varanasi is organizing a short term course on Efficient energy conversion in harmony with environment, during Oct 29-Nov3, 2018. Last date for registration 6-10-2018.

Conference

September 2018

- WCX 2019 Call for Papers: Present your forward thinking to 10,000 of your peers and subject matter experts at the 2019 WCX World Congress Experience. Last date for submission: September 4th, 2018. Abstract submissions are now being accepted for Body/Chassis/Safety, Propulsion/Powertrain, Electronics/Connectivity, Environment/Emissions, Materials/Light weighting, and Design/Manufacturing.
- TechnoVIT 2018 - An International Technical Extravaganza is going to be organized by VIT, Chennai Campus, during 06th to 08th September 2018. The template for preparing the paper can be found in the URL, **http://bit.do/es8kE**

  The **Research / Review** papers shall be submitted to **technovit18.paper-presentation@gmail.com**
- 8th International Conference on 3D Printing and Additive Manufacturing Technologies- MAKE IN INDIA, is being conducted on 7-8th September, 2018 at The Lalit Ashok, Bangalore.

  For more information: http://www.amsi.org.in/
- Seminar on Composite Materials for General Engineering, Armour and Aerospace Applications conducted by the Department of Production Engineering of PSG College of Technology, Coimbatore on 28-29

September,2019. The Keynote Speakers are from University of New South Wales, Canberra, Australia and Eminent Scientists from India. Faculty members and research scholars can attend/present paper in the seminar.The selected papers will be published in International Journal of Materials Engineering Innovation (Inderscience) Scopus Indexed Journal as Special Issue.

December 2018

- TRIBOINDIA – An International Conference in Tribology conducted by Veermata Jijabai Technical Institute (VJTI), Mumbai, India from 13th-15th December 2018. Submission of a Technical paper can be made online on the Tribology Society of India at the following link :
  http://tribologyindia.org/triboindia-abstract-submission.html
  Submissions can also be done by email on triboindia2018@vjti.ac.in
  Events include an Exhibition stall showcasing your products and services to the conference delegates during the conference and a business meet to present your products and services to the conference delegates for 20 minutes. Participants can attend the conference as a delegate.

January 2019

- International Conference on Recent Advances in Materials, Manufacturing & Energy Systems (ICRAMMES) organized by the Department of Mechanical Engineering of VRSEC on **3-4th January 2019** in VRSEC, Vijayawada, AP, India. Our submission deadline for extended abstract is on 30th September 2018.

March 2019

- The Department of Mechanical Engineering of S.A. Engineering College is organizing **2 Days SERB sponsored International Conference on Recent Developments in Mechanical Engineering (ICRDME) 2019** on 21st & 22nd March 2019. Conference website: **www.icrdme.com**

  Abstract submission by Oct 5, 2018

Challenges/Contests

September 2018

- KPIT Sparkle gives you an opportunity to imagine, ideate and develop technical innovations with high social impact to solve existing blind spots within the energy and mobility disciplines. We invite registrations from students across the nation to come ahead and be a part of revolution where innovation lies at the epicentre. Visit https://sparkle.kpit.com/ for more details.
- TATA INNOVERSE- Design solutions for various challenges posed and win exciting prizes and attractive awards.

  For more info on challenges visit www.tatainnoverse.com.
- Nokia open innovation challenge: The Nokia Open Innovation Challenge, in partnership with NGP Capital, is looking for new innovative products and solutions within the Industrial IoT domain. It is time to submit your greatest ideas for technology and business models which could change the world. Together with Nokia Bell Labs experts and mentors you can make a difference and potentially grow your business to new levels.

  Last date for submissions: September 6, 2018
  For more information visit: https://www.nokia.com/en_int/about-nokia/news-events/events-calendar/open-innovation-challenge
- Innovate with India, Change the world: Texas instruments (TI) invites all student innovators, thinkers and makers of the country to join the revolution, who have a dream to create something new, aspire to make

a difference, contribute to India's innovation hub. Give your ideas a jump-start by sculpting your innovation with support from Texas instruments.

For more information visit: https://innovate.mygov.in/india-innovation-challenge-design-contest-2018/

- Messi is a National Level Technical Symposium to be held on 4th September organized by the Department of Mechanical Engineering of Sri Sairam Institute of Technology. Events include CONCEPT KNOCKDOWN, RC DIRT RALLY, TRASH MASTER, BOTTLE TORPEDO and BE THE CADET.

- ACM sponsored One Day Inter Collegiate contest on "Modern Tools Usage" organized by Thiagarajar College of Engineering, Madurai. One day Inter-college contest on Smart tool usage to solve engineering problems on September 24, 2018.

Event 1: Tools Info - Video Presentation
Event 2: Tools Demo Demonstration
One page abstract with team details (Max of 3 Students - Student Name, Reg.No, Department, Phone Number & Email-Id) need to be submitted through mail to **erit@tce.edu** by 07.September 2018

Last date for submitting abstract/idea – 07.09.18

Selection of intimation - 14.09.18

Register in the Google forms: https://goo.gl/forms/2Nazz6c65t2ew5Tv1

- INUP-NANOTECH HACKATHON Contest 2018
  INUP is conducting a contest on innovativevnano electronics- based device fabrication targeting technologies at affordable costs addressing societal needs. "Innovative solutions for societal problems through nanotechnology". Online applications are invited from interested researchers from academia in the prescribed registration form. You can also visit INUP website (www.inup.iitb.ac.in) for the more information. The winner of the contest will get an opportunity to utilize the facilities at IITBNF to fabricate/characterize the proposed devices with all the required support from INUP on priority basis.
  Proposal Submission deadline: September 30, 2018

May 2019

- Fentress Global Challenge: In line with the speculative nature of the competition, participants should seek to improve every dimension of the airport terminal building. All entries should delve into one or more broad topic related to airport architecture and the future of aviation such as mobility, urbanization, globalization, technology, flexibility, security, project feasibility, and passenger experience in 2075.

  For more details, visit https://fentressglobalchallenge.com/competition-brief

  Last date for submission: 31 May 2019

Smart India Hackathon 2019 has been launched at New Delhi by the HRD minister Sri. Prakash Javadekar. Please check the following link:

http://www.uniindia.com/smart-india-hackathon-3rd-edition-launched/india/news/1334501.html

Boeing Contest
Boeing - IIT National Aeromodelling Competition for college students in India is sponsored by Boeing, and conducted in collaboration with IIT Bombay, IIT Delhi, IIT Kanpur, IIT Kharagpur and IIT Madras. Logistics support for this event is provided by Skyfi Labs.

The competition is launched with the vision to provide a unified national platform for students interested in aerospace and related engineering disciplines - to demonstrate their aero-modelling expertise.

This would be a two-staged pan India Competition:

- Zonal Level: The Zonal would be held in conjunction with the Technical Festivals of IIT Bombay, IIT Kanpur, IIT Kharagpur and IIT Madras. The First three teams from each of the Zonal competitions, a total of 12 teams from the Zonal competitions, will participate in the National level.
- National Level: The National Level Competition will be held at IIT Delhi for all the toppers from the Zonal Round to decide the champion.

For more information visit:
https://www.skyfilabs.com/boeing-competition-2019?utm_source=boeing_announcement&utm_medium=newsletter&utm_campaign=boeing_competition_2019&utm_content=competition_announcement

FLY YOUR IDEAS 2019

Airbus Fly Your Ideas is a global competition, which challenges students worldwide to innovate for the future of aerospace. For the 2019 competition, the focus is on using the latest digital technologies to create smart solutions for a safer, cleaner and a more connected world.
This is a fast-moving and exciting time for aerospace and Fly Your Ideas is a unique opportunity for students worldwide to activate their pioneering spirit and innovate for the future. With support from Airbus employees from across the company, we encourage students to think big, be bold and help transform the world of aerospace.

Since 2008, over 20,000 students have registered for Fly Your Ideas from over 650 universities and 100 countries worldwide, with more than 400 Airbus employees volunteering their time to support the competition.
Airbus launched Fly Your Ideas in 2008 to engage with universities and students worldwide and from all backgrounds. Since 2012, the United Nations Educational, Scientific and Cultural Organization (UNESCO) has been a partner for this competition.

Six new challenges

(A) Electrification: How can we fly further, longer and cleaner by developing embedded electrical energy systems?
(B) Data Services: What innovative applications and services can you create based on Airbus data?
(C) Cyber Security: How can we securely and seamlessly authenticate travellers while minimising the impact on passengers, airport security and airlines?
(D)Internet of things: How can the power of IoT revolutionise the passenger experience or improve collaboration in the aerospace industry?
(E) Artificial Intelligence: In the future of aerospace or industrial manufacturing, how can we use AI to identify opportunities or entirely new business models?
(F) Mixed reality: How can the aerospace industry put Apple and Google's mass market Mixed Reality apps to work?
Registration and challenge discovery- June to September 2018!

Price fund: €45,000

For more information visit: https://www.airbus-fyi.com/

Research News from MSP

1. 4th India International Science Festival (IISF-2018):

Science for Transformation, 5-8 October 2018, Organized by Ministry of Science and Technology at Indira Gandhi Pratishthan (IGP), Lucknow-226010, Uttar Pradesh (U.P.)

Website Link: https://scienceindiafest.org/

2. 106th Indian Science Congress - Future India:

Science and Technology, 3-7 January 2019, Organized by The Indian Science Congress Association (ISCA) at Lovely Professional University, Phagwara-144411, Jalandhar, Punjab

Website Links:
106th Indian Science Congress: http://isc2019.org/
Brochure: http://www.sciencecongress.nic.in/pdf/GI_2019.pdf
ISCA Home: http://www.sciencecongress.nic.in/

3. DST - Call for Entries - Augmenting Writing Skills for Articulating Research (AWSAR-2018)

Eligibility criteria for article submission
The following are the eligibility criteria for submitting the article for award
1. The entries will be invited from the youth pursuing PhD in S&T and Post Doc fellows from a recognized University/R&D Institute.
2. Applicants must be an Indian citizen.
3. Applicants can only submit single article in a year. Re-application by applicants from previous years is encouraged, as long as the eligibility criteria continue to be met. However, past winners of the Award will not be eligible to submit a research story second time in the same category.

Selection Criteria
The following will be the criteria for judging the entries
1. The entries will be judged on the basis of accuracy, clarity, insightfulness, fairness, and resourcefulness.
2. The entries should convincingly answer the questions such as Why does the research matter? Does the article explain the writer's research in a way that is easy to comprehend? Is it a compelling read? etc.
3. An Expert Panel of science communicators, media persons, subject experts and practitioners, constituted by DST, will evaluate the submitted science stories.

Award categories
1. Selection of best 100 entries of popular science stories and prizes.
a. **For Ph.D researchers:** The initial screening of the entry will be done by expert panel. 100 entries will be selected and each will be awarded with cash prize of Rs.10,000/- along with Certificate of Appreciation.
b. **For Post doc fellows:** Twenty entries would be selected from articles submitted by PDFs relating to their line of research. Each will be awarded with cash prize of Rs.10,000/- along with Certificate of Appreciation.

2. Selection of top three leading stories
a. **For PhD researchers:** The top three articles/stories will be selected from the leading 100 stories. Further, they will be awarded with the cash prize of Rs.1,00,000/-, Rs.50,000/- and Rs.25,000/- respectively.
b. **For Post doc fellows:** One outstanding article/story will be selected from the leading 25 stories. Further the same will be awarded with the cash prize of Rs.1,00,000/-.

These awards will be bestowed on 28 February at National Science Day event every year. All the awardees will be given an opportunity to attend Science Film Training Workshop organized by Vigyan Prasar.

Last date for submission of application: **30th September 2018**

Website Links: http://www.awsar-dst.in/about

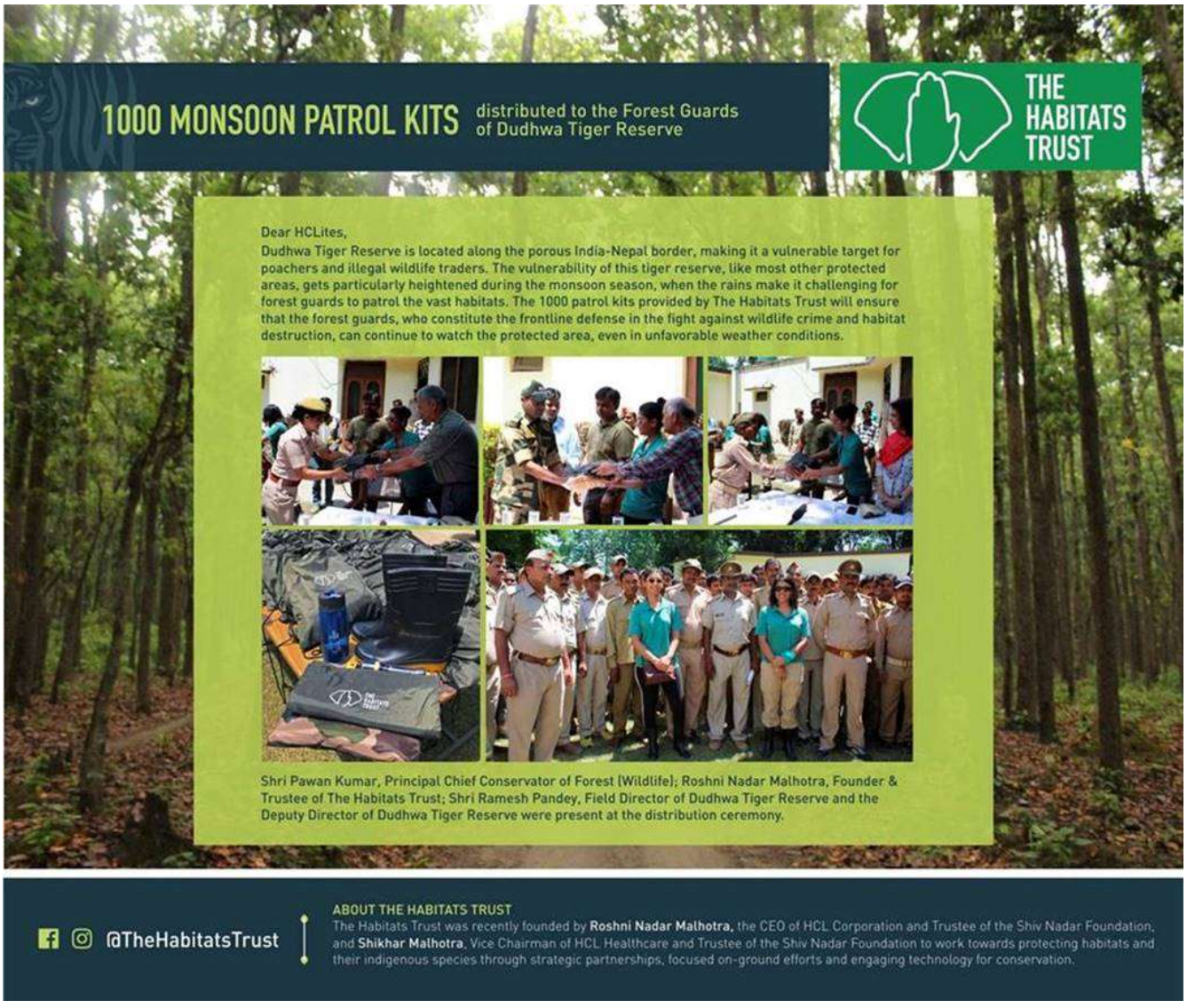
ARAI

ARAI Updates published from time to time during the Financial Year 2017-18 are compiled together as an Index Issue and uploaded on ARAI Website www.araiindia.com . Index Issue comprises of various articles. Please use below given link for browsing he contents of the Index Issue:

https://araiindia.com/cpanel/Files/NEW_86201834342PMARAI_Update_Index_Issue_2017-2018.pdf

Group News

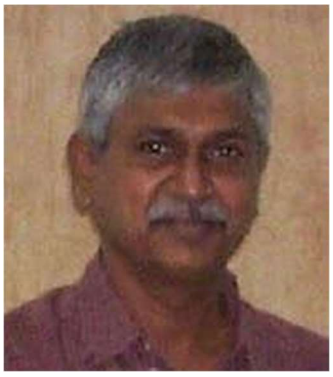
1000 Monsoon Patrol Kits distributed to the Forest Guards of Dudhwa Tiger Reserve



As it reads on the website:
The Habitats Trust is a coalition of passionate individuals coming together with the aim of securing key habitats and their indigenous species. The mission of the Trust is to create and conserve sustainable ecosystems through strategic partnerships and collaborations with all stakeholders at every level. We envision our natural habitats to be secured for future generations, and all species sharing our planet in all fairness and harmony.

Visit : https://thehabitatstrust.org/

Inspiring Life Stories



Mr. Kishore Babu

Schwing Stetter

The year was 1990. I was returning from Delhi by flight with a monk of the RamaKrishna Mission. A journalist from Chile was there with us . He started interviewing the monk, as had been decided earlier.

Journalist - Dear Sir , in your last lecture, you told about Jogajog (contact) & Sanjog (connection). It's really confusing. Can you explain it to me ?

The Monk smiled a little but apparently deviating from the question, he asked the journalist: Are you from Chile ?

Journalist(J) – Yeah...

Monk (M) - Who are there at home ?

The Journalist felt that the Monk was trying to avoid answering his question since this was a very personal and unwarranted question. Yet the journalist said: "Mother has expired. Father is there. Three brothers and one sister. All are married..."

The Monk, a smile on his face, asked next: - "Do you talk to your father?"

Now the journalist looked visibly annoyed...

The Monk - "When did you talk to him last?" The journalist supressing his annoyance said: "May be a month back."

The Monk: "Do you brothers and sisters meet often ? When did you last meet as a family together?"

At this point, I saw sweat on the journalist's fore head. I wondered who was taking whose interview. It seemed that the Monk was taking the interview of the journalist.

With a sigh , the journalist said: "We met last at Christmas two years ago."

The Monk: " How many days did you all stay together ?"

The journalist (wiping the sweat on his brow) : "Three days..."

Monk: "How much time did you spend with your Father, sitting right beside him ?"

I saw the journalist looking perplexed and embarrassed and scribbling something on a paper...

The Monk: "Did you have breakfast or lunch or dinner together ? Did you ask how he was? Did you ask how his days are passing after your mother's death ?"

I saw the journalist's eyes sadden.

The Monk placed his hand on the journalist's hand and said: "don't be embarrassed or upset or sad. I am sorry if I have hurt you unknowingly...

But this is basically the answer to your question about "contact and connection (jogajog and Sanjog)". You have 'contact' with your father but you don't have 'connection' with him. You are not connected to him. Connection is between heart and heart... sitting together , sharing meals , caring for & hugging each other. Touch , shaking hands, having eye contact, spending some time together...You brothers and sisters have 'contact' with each but you have no 'connection' with each other...."

The journalist wiped his eyes and said : "Thanks for teaching me a fine and unforgettable lesson"

Moral of the story: This is the reality today. Whether at home, in society and elsewhere everybody has lots and lots of contacts but there is no connection. No communication. Everybody is in a his or her own world. Let's not be well "contacted" - let's be well "connected" with each other ..... caring, sharing , touching , hugging , spending time together with all our near and dear ones, and other co-passengers in our life travels

Thanks & Regards –

Kishore Babu
HR - Department
SCHWING Stetter India Private Limited

Corporate Wisdom 57

Event versus Experience

What happens to us is an event. How we process, perceive and interpret that event becomes our experience. So, the same event becomes different experience for different people, depending on how they process, perceive and interpret it.
Being pushed out of the train at Pietermaritzburg railway station in South Africa was an event. However, the way he chose to process, perceive and interpret that event turned out to be a turning point not only for Gandhi, but also for a great nation.

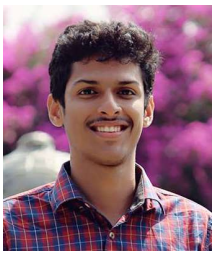
So, it is evident that more than problem, it is our reactions to the problem that hurts us more. More than the calamity, it is our fear of the calamity that hurts us more. More than our actions, it is how we process, perceive and interpret our action that has a bearing on the relationship, it also has a bearing on my peace of mind.
The way we see the problem is the problem. The way we see the problem can also be our solution. If we see it as a failure, it is a failure. Instead , if we see failures as a mere outcome with a feedback, we can improve with every experience. Success has its share of lessons and so do failures. In fact, what failures can teach, success cannot; and what success can teach, failure cannot. Good times, bad times, or filtering times are all matters of perceptions. We can choose to perceive any event the way we want. So, progress and stagnation are just the result and effect of how we choose to process the events of our life.
What happens to us is not in our control. But, how we process what happens to us is completely in our control. And in controlling that, we control our whole life. So, if everything about our life has to change, all we have to do is to change the perceptions we hold in our head.
Events are Creator's responsibility. Experiences are human's responsibility.

#WishingMostAndMore
Have a great day & wonderful week.
R.Ramakrishnan

This issue has an Annexure-
Guidelines for MS aspirants from
Tarun Subramanium (2017 passed out)

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

This edition of Aspire was compiled by Nitin Joy, with support from Sowmya K and CT Alagappan



Nitin Joy

Sowmya K

CT Alagappan

Compiled and released by Editorial Board, Mech Feedback to annamalaive@ssn.edu.in