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## **FISITA 2018**

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The first week of October 2018 was a momentous one for India and the automotive industry. That's because the 37th FISITA World Automotive Congress – a congregation of international automotive leaders and experts - was held in Chennai from October 2-5. It was the first time the biennial industry event, first organised in 1947 in Paris, was held in India, which speaks volumes for the country's growing status in the global automotive scheme of things. SAEINDIA, the local arm of SAE International, hosted the four-day event at the Chennai Trade Centre on the theme of 'Disruptive Technologies for Affordable and Mobility'. SAEINDIA, Sustainable with membership base of over 50,000, is the biggest affiliate of SAE International.

FISITA or the International Federation of Automotive Engineering Societies, has 37 member bodies globally. With disruptive technologies in the auto industry gaining significant momentum and India being a hub for IT and software development, the event essentially was meant to enable participants from all across the world to not only exchange ideas but also brainstorm challenges and changes that these new trends offer. And it proved to be an engineering tech tour de force, what with 400 delegates, 90 exhibitors and over 1,500 visitors.

Nearly 90 exhibitors including carmakers BMW, Toyota and Nissan wowed with their latest technological advancements on the EV front;

component majors like AVL, Bosch and Continental revealed their breakthrough technologies for vehicle electrification; and testing equipment suppliers such as ATS, IDIADA, iASYS and Faro along with software majors Dassault Systems and PTC gave a hint and more of how they can support ADAS (Advanced Driver-Assistance Systems) and EV validation. There was also participation from leading colleges of the likes of IIT Madras, Hindustan Institute of Technology and Vel Tech showing how young talent is being nurtured at these institutions to make them industry- and future-ready.

In an interesting plenary session on educating the mobility engineers of tomorrow, Professor Helmut List, CEO, AVL, made a detailed presentation where he depicted autonomous driving and shared mobility as the new mobility solutions for the future. He said, "CO2 reduction remains a big target for automotive companies and answers such as ICE-based hybrids (XEVs), full EVs or even FCEVs (Fuel Cell Electric Vehicles) have the potential to emerge as the new propulsion technologies. While each technology has its own set of merits and demerits, their adoption will largely depend upon a country's power and fuel generation roadmaps."

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With this huge variety and complexity, he described how engineers are shouldered with an essential task of creating products that are based on flexible, yet, integrated systems, which include power electronics such as state-of-the-art electric axles and battery packs. "Multiple variants, system complexity and environmental regulatory conformity will call for an atmosphere of increasing partnerships within the industry. Quicker development will also need more analysis being done in the virtual world," advised Professor List.

He explained how methodologies such as fully integrated software and simulated analysis tool chains such as Hardware-in-Loop (HIL) are going to become important assets towards testing and validating these powertrain solutions of tomorrow. "The modular engine families of today need to be transformed into those sustainable ones of the future, which could cater well to the consumer requirements," remarked Professor List. He added that "prices of battery cells are coming down and will go below US\$ 100 per kWh by 2022. Engineers will have to work around the battery packs in order to get the maximum range and performance possible. The next stage in terms of battery technology will be solid-state battery cells which are set to enhance range further." On the other hand, electric charging infrastructure and the longevity of batteries with fast charging remain the other areas demanding crucial research. "For a company to arrive at the right decision for product development, there needs to be an in-depth assessment of the entire technology spectrum," he concluded.

BMW's vice-president for vehicle safety, Professor Klaus Kompass threw light on the potential of active safety systems in cutting down road fatalities by monitoring vehicle dynamics and actively preventing accidents in the first place. "98% of road accidents are caused by human errors, and even though technical systems are advanced, they have their own strengths and weaknesses too," said Kompass. He showcased how BMW has been marching towards developing and deploying contemporary ADAS functions such as autonomous emergency braking (AEB), adaptive cruise control (ACC), and other associated radar monitored safety functions which help aid driver in responding to a situation and preventing a crash.

India, with its safety regulations such as frontal- and sideimpact crash testing norms becoming mandatory for new models from October 2017, and now set to cover all existing models from October 2019, is also set to march in the direction of reducing the number of road crash fatalities on its roads, with the government upping the ante by putting in drastic regulatory reforms.

While it all boils down to individual road manners in the real-world, engineers are tasked with the humongous job of enhancing vehicle safety, as well as reducing vehicular emissions, all at the same time. The FISITA Congress, with a substantial display of innovative technological solutions as well as developmental tools gave the industry a right platform to muster up and collaboratively act towards a better tomorrow.

In a panel discussion on 'The future of mobility', Autocar Professional's executive editor, Sumantra B Barooah, set the tone by taking into consideration the '7Cs' as defined by Prime Minister Narendra Modi at the MOVE Summit last month in New Delhi.

While Common, Connected, Convenient, Congestion-free, Charged, Clean and Cutting-edge emerged as the key focus agendas from the prime minister's speech for OEMs and researchers to move towards a sustainable tomorrow, the panellists were largely of the opinion that India has its own set of unique challenges, which need to be solved by solutions which are customised, adapted and even built specifically for the country.

A technology-agnostic policy roadmap towards a cleaner future is also something which the industry demanded, given there is a need to significantly invest in R&D for developing innovative technologies.

Overall, FISITA 2018 achieved what its overall aim is: to support and encourage the world's engineers to achieve their goals and create solutions which continually push the boundaries of technology and improve our society, especially where they relate to mobility, safety and the environment.

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#### **EFFICYCLE 2018:**



SAEINDIA Northern Section (SAEINS) successfully conducted the eighth season of Efficycle from 9th to 13th October 2018 at Lovely Professional University (LPU), Phagwara, Punjab. The event was organized in association with Maruti Suzuki (MSIL), International Centre for Automotive Technology (ICAT) and Indian Oil Corporation Limited (IOCL). The event was held under the convenorship of Dr. Reji Mathai, Chief Research Manager, IOCL R&D supported by two Co-Conveners Mr. Deepak Panda of MSIL and Mr. Jitendra Singh Gaur of ICAT.

Teams had designed and fabricated the energy efficient human powered three wheeled electric hybrid vehicle which was driven by two drivers simultaneously using human drive along with electric drive having maximum motor output power of 600W. This year about 73 teams participated in the main event. The theme for this year was "Dynamic Resilience Season". Teams were guided throughout the season to improve the design parameters & build quality in order to obtain better performance of the vehicle. This year main focus was to improve the dynamic behaviour of Efficycle vehicles.

Teams had appeared for the technical inspection of their vehicles which includes Safety Check in which technical inspector inspected the vehicle as per the rulebook guidelines, Brake Test to check the brake functioning, Fig of 8 test to check the turning radius of the vehicle and electric inspection to check the output power of the motor. Along with the technical inspection static events like Weight Check, Design Evaluation, Cost Evaluation, Build Quality evaluation, Innovation round and Marketing Presentation

were started and teams were judged by the experts from Automotive industry.

Some teams also presented their ideas on futuristic technologies relevant to Efficycle applications which included use of energy regeneration system, physically disabled friendly features, Collision detection and Speed Control system, usage of composite materials in vehicle frame etc.

Teams who cleared their technical inspection were allowed for the dynamics event like Acceleration test in which vehicle has to complete 100m, Gradient simulation test in which vehicle has to run with payload in the vehicle, drive excellence test in which team has to complete 500m track only on electric drive. The teams finishing the individual dynamic event in least time were winners of individual dynamic events.

On the final day the teams who cleared the technical inspection were allowed to participate in 1.5 hours of endurance race on 2 Km track having sharp turns and other difficulties.

Endurance was followed by the valedictory ceremony and awards of ₹ 5.60 Lakhs distributed among the winner and runner up of all sub category events like Best built up quality, Innovation award, Marketing Presentation award, Design Award, Cost Award, Light Vehicle Award, Drive excellence award, Gradient simulation Award, Acceleration award, Best Girl participant award, Dronacharya Award for faculty, Runner up of endurance run, Winner of Endurance run, Overall Second runner up, Overall first runner up and Overall Winner of Efficycle 2018.

This season Overall Winners was Team Green Rangers from Santlongowal Institute of engineering and technology, Sangrur, Punjab. First Runner up was Team Effiroaders 6.0 from Chameli Devi Group of Institution, Indore, Madhya Pradesh and Second runner up of Efficycle 2018 was Team Velociracers from College of Engineering, Pune, Maharashtra.

#### **TIFAN 2019 – QUALIFICATION ROUND:**



SAEINDIA's TIFAN 2019 – Qualification round conducted at MIT, Pune: SAEINDIA Off-Highway Board conducted qualifying round of 2<sup>nd</sup> edition of its unique competition named TIFAN (Technology Innovation Forum for Agricultural Nurturing) for engineering and agricultural engineering students at "Maharashtra Institute of Technology" (MIT), Pune. The objective of TIFAN competition is to provide a platform for Agricultural product innovation by generating a talent pool for off-highway industry. This competition will also provide the undergraduate students hands-on experience towards agricultural / off-highway machinery and process. Eventually, such endeavours will help the society by enabling the small and marginal farmers with farm mechanization for yield and productivity improvement.

The qualifying round of competition was inaugurated by Dr. Indre Mani, President, Indian Society of Agricultural Engineering. & Head of Agricultural Engineering. ICAR, New Delhi as Chief Guest. Dr. Mani liked TIFAN concept very much and he encouraged all the young engineering students to solve the challenges of agricultural sector during his speech. He creatively coined the term 'Engineering Agriculture' to bring out an overwhelming change in Indian farming conditions. He also appreciated the efforts of TIFAN Organizing committee to conceptualize and executing this idea of competition. TIFAN 2019 witnessed overwhelming response all over the India. Students from 37 colleges from 7 states across India participated in qualifying round. Most of the teams came up with new innovative designs for self-propelled onion harvester.

Judges from different industries were very happy with the thought process from students and provided their valuable inputs for further improvements in the designs. The shortlisted colleges after this round will go for the final round where they have to demonstrate the physically build machines in the field. The final will be held at Mahatma Phule Krishi Vidyapeeth (MPKV), Rahuri in the month of March 2019.

Dignitaries present during the inauguration event were Mr. Sandeep Mahajan, General Manager, John Deere India and Convener TIFAN 2019 Mr. Sanjay Nibandhe, Chairman, SAEINDIA Western Section; Mr. Nilkanth Devshetwar, Head, Competency, Technology & Labs, John Deere India; Prof. Prakash Joshi, Founder, Joint Managing Trustee MAEER's MIT; Dr. D. D. Pawar, Associate Dean and Registrar, MPKV Rahuri; Mr. Mahesh Masurkar, Secretary, SAEINDIA Off-Highway Board; Mr. Amol Waghmode, from Cummins and Co-convener of TIFAN 2019; Mr. Narahari Wagh, Secretary SAEINDIA Western Section and Mr. Ramesh Pasarija, Deputy Director, SAEINDIA Western Section.

#### **AWIM NATIONAL OLYMPICS:**



The 11<sup>th</sup> AWIM National Olympics was organised at Chitkara University, Chandigarh from 22<sup>nd</sup> to 24<sup>th</sup> Dec'18. 1<sup>st</sup> time AWIM has been organised jointly by both SAEINDIA Northern & Western sections together. The event was spaced out over 3 days starting with Inauguration ceremony on 22<sup>nd</sup> December, followed by the fabrication of toys and track event on 23<sup>rd</sup> December.

AWIM Nationals got overwhelming response from all SAEINDIA Sections covering 37 cities across India, an amalgamation of young spirits bubbling with energy and passion converged from Govt. administered schools to privately owned schools at Chandigarh to share common

platform to exhibit talent. Gathering of 260 students from nearly 65 schools with Teachers and College volunteers comprising a team of 4 students, one teacher and one college volunteer.

Automotive leaders like Maruti Suzuki and Mahindra supported this event with more than 100 Industry volunteers coordinating various activities with the help of host "Chitkara University, Chandigarh. AWIM is a teacher-administered, industry volunteer assisted program that brings Science, Technology, Engineering and Math (STEM) education to life in the classroom for students in grade 5 and grade 6. Students learn practical application of laws of Physics while making AWIM Toys and also undergo experience of how to work in a team and execute projects.

The competition was divided into three main categories namely

- Fabrication of toys where the students were allotted two hours to make toys and prepare oral presentation.
- Track events the next step was to evaluate their toys on track for different parameters such as maximum distance, speed, accuracy, ability to carry weight etc.
- Presentation Round The final step is to showcase their creative ideas via presentation which they have made emphasizing on Eco friendliness, safety features, social awareness, and Connected and Automated cars.

AWIM National Olympics commenced with the auspicious tradition of lamp lighting by all dignitaries. It was followed by a welcome address from Convener Mr. Alok Jaitley and words of wisdom from Chief Guest Dr. Sarit K Das, Director, IIT Ropar and Ms. Archana Mantri of Chitkara university. On this occasion Convener Mr. Alok Jaitley congratulated all participants for making it to the National and said "AWIM is a great platform for you all to exhibit your talent and experience practical application of teaching at school. This experience will help you building an interest in Technical field ".

Chief Guest Dr. Sarit K Das motivated the students, he asked all to "Enjoy and have fun in next two days, Learning will come on its own, don't stress yourself with studies but innovate to do good in life ".

On the concluding day, results were announced in the gracious presence of Chief Guest Dr. Bala Bhardwaj, President, SAEINDIA. He said "I am very much overwhelmed by seeing so much passion among Industry Volunteers, Organisers and all participant students. He highlighted that not only Automobiles but Aerospace can also excite you so enhance your horizon and excel.

Jet Toy Overall winner award went to "Modern Education Society English Medium School" and Skimmer award went to "Swami Swarupanand Vidya Mandir, Pavas Ratnagiri". First Runner's up in Jet category was Tagore International School, Delhi and in skimmer category NMC School, Nasik. Event was widely covered in Print and electronic media namely "The Tribune, Punjab Kesari, Punjabi Tribune, Dainik and, Chardikala time TV, etc. Feedback was encouraging as summarized by Mr. Akshay Singla, MSIL "There is lot of potential in the students who can do wonders if they are given correct guidance. AWIM event is a platform, where they learn teamwork, creativity, competition spirit."

SAEINDIA thank all sponsors who came forward to support AWIM namely Maruti Suzuki, Mahindra Rise, Chitkara university, Trim India, John Deere, Altair, Lumax, Uno Minda, ATS, IOL, ARAI, iCAT, Polyplastics and Eaton.

## **SAEINDIA Section News - Bengaluru (SAEIBS)**

#### **AWIM REGIONALS – TVS IQL:**



SAEIBS conducted the AWIM Regional Olympics on 08.12.2018 at TVS IQL, Anekal. About 27 teams across Bengaluru section participated in the event. Dignitaries from GMTCI, Continental AG, GE, TVS and 11 school were present during the event.

## **SAEINDIA Section News - Northern (SAEINS)**

#### **AWIM REGIONALS - DELHI & NCR:**



SAEINS AWIM Jettoy and Skimmer Regional Olympics 2018 for Delhi and NCR Regions were conducted successfully on a prodigious scale at Maruti Suzuki Training Academy, Gurugram on 23<sup>rd</sup> & 24<sup>th</sup> October, 2018 amongst the myriad of enthusiastic students and teachers from schools all over Delhi. Over 200 students from 23 schools in and around Delhi & NCR with 80 Volunteers from nearby industries participated in the program.

#### **AWIM REGIONALS - HARYANA:**



SAEINS AWIM Jettoy and Skimmer Regional Olympics 2018 for Haryana Region were conducted successfully on a prodigious scale at JMIETI, RADAUR on 30<sup>th</sup> November, 2018 amongst the myriad of enthusiastic students and teachers from schools all over Haryana.

Over 200 students from 23 schools in and around Delhi & NCR with 80 Volunteers from nearby industries participated in the program.

#### STUDENT CONVENTION:



SAEINDIA Northern Section (SAEINS) conducted the Student Convention at KIET Group of Institutions Ghaziabad on 1<sup>st</sup> November, 2018. The convention was attended by different members of Northern Region (including IMSEC, AKGEC, KEC, etc.) The distinguished guests that attended the convention are, Mr. Sandeep Raina, Vice Chairman, SAEINS and VP –Engg, MSIL; Mr. Rakesh Sood, Vice Chairman, SAEINS and MD, Trim India; Mr. Anup Kacker, ED, SAEINS; Dr. Felix Regin A, AGM, MSIL; Mr. Sandeep Sharma, DGM-Corporate Technology, Minda Industries and Mr. Yogendra Singh Kushwah, Section Head, Subros.

Mr. Mahesh Munjal, CEO, Majestic Auto congratulated the institute and the people of organising committee for organising the student convention. He acclaimed that these type of events provide a platform to students for showcasing talents. He also suggested that the educational institutes need to find the interest of the students in their respective fields so that the performance of the students can be enhanced in a particular field.

Mr. Sandeep Raina gave a little perspective of auto industry in the current scenario. He briefed that auto industry has an annual growth of 7-8 % annually and is the key industry contributing to growth of GDP of the country. He discussed about key challenges faced by automotive industry in view of safety and emission norms laid by government of India. Also the cost effective new technologies are being developed by the automotive industry in this regard. He also told that SAEINDIA is a non-profit organisation and is a group of professionals who are voluntarily working together to exchange technical knowledge and also have a forum where the professional can exchange views with the students and try to bridge the gap between academia and industry.

Dr. (Col.) Amik Garg, Director, KIET briefed about the different events and delivered the vote of thanks. The various events conducted in the convention included are,

- Expert lecture series
- Technical Poster Presentation
- Technical Paper Presentation
- Project Exhibition

Expert lecture series was attended by more than 150 students and included the presentations from:

- Mr. Yogendra Singh Kushwah on "Mobility Engineering: Opportunities and Challenges".
- Dr. Felix Regin A on "Aerodynamics & Aero acoustics Performance of Automotive Vehicle".

In technical paper presentation a total of 19 technical papers were presented by different students.

- 1st Prize: Mr. Ayush Agarwal of KIET for "Modelling of Visual Performance in Mobile Environment"
- 2<sup>nd</sup> Prize: Mr. Rohan Singh of KIET for "Design, Analysis and Fabrication of a Reduction gearbox for an ATV".

In technical poster presentation a total of 28 posters were presented by different students.

- 1st Prize: Mr. Aman Singh, Mohd Ahmad, Abhinav Biswas, Mirza Suhaib Beg from Team Maas, of IMS Engineering College for the poster "Hybrid Bicycle".
- 2<sup>nd</sup> Prize: Mr. Shivank Bhardwaj, Malay Katiyar from the team Techbuddies, of KIET for the

In project Exhibition, a total of 24 projects were demonstrated by different students.

- 1<sup>st</sup> Prize: Mr. Suryansh Rathore from Team Intruders for the project "ATV Rover".
- 2<sup>nd</sup> Prize: Mr. Ahsan Islam from the team Accelerators for the project "Go Kart".

#### **SAEINDIA Section News - Southern**

#### **TOPTECH PROGRAM:**



SAEINDIA Southern Section (SAEISS) conducted the Toptech program on Fiber Reinforced Composite Product Design at SAEISS Office on organized on 26<sup>th</sup> & 27<sup>th</sup> October 2018. Mr.T. Kasiraja Thangapandiyan, Treasurer, SAEISS took the inaugural session and welcomed all the participants. He introduced the faculty to the participants. Dr. Subramanian Muthusamy started the session with the basics about the Reinforced Composite Product Design.

On the 1<sup>st</sup> day he started the session with general introduction about the participants followed by the introduction about the Reinforced Composite Product Design. He also gave a brief introduction about the Different Between isotropic and Orthotropic Materials. He also briefly explained about the Elastic Constants of Composite Materials as well as Lamina, Laminate Analysis and Classical Lamination Theory (CLT).

On Day 2 the speaker started the session with the Design and Analysis Composite Pressure Vessel for Automotive Applications. He also explained about various recent advancement in the Fiber Reinforced Composite Product Design and gave practical training to the participants. Mr. Francis Augustine Joseph, MC Member, SAEISS took the valedictory function and delivered the vote of thanks. He also thanked Dr. Subramanian Muthusamy for sharing his knowledge with the participants and also thanked the participants for spending their time in the toptech program.

Mr. Francis Augustine Joseph also distributed the certificate to the participants.

#### **TDC 2019 WORKSHOP:**



SAEINDIA Southern Section (SAEISS) conducted the Tractor Design Competition at Valliammai College of Engineering, Chennai from 29<sup>th</sup> to 31<sup>st</sup> October 2018. During inauguration, Dr. R. Rajendran, Chairman, Engineering Education Board, SAEINDIA; Dr.B. Chidambararajan, Principal, Valliammai Engineering College; Dr. K. Siva kumar, HOD, Mechanical, Valliammai Engineering College were present in the dais. Dr. Siva Kumar welcomed the dignitaries and participants for the workshop and also gave a brief outline about the Tractor Design Competition 2019. Mr.S. Nakkeeran, Director, HEXDOF Engineering Service Pvt Ltd, Chennai, delivered a talk about the importance of Tractor Design Competition and he delivered a speech about the manufacturing of tractor.

In all the 3 days there were about one session in morning and other after lunch. On Day 1 Mr. S. Nakkeeran & Mr. C. Varatharajan both from HEXDOF Engineering Service Pvt Ltd, Chennai, handled a full day session on Introduction to rulebook, Chassis and Frame starting with introduction to tractors and other agricultural machineries and then explaining about Chassis, Frame, Front Axle, Radiator and other parts.

On Day 2 the same team from HEXDOF Engineering Service Pvt Ltd, Chennai started the session with Air Intake and Exhaust & Steering system in the 1<sup>st</sup> session followed by Brakes, Wheels and Tyre in the 2<sup>nd</sup> session. On Day 3 the same team from HEXDOF Engineering Service Pvt Ltd, Chennai started the session with Clutch, Brakes, Transmission, Propeller shaft and Rear Axle in the 1<sup>st</sup> session followed by Designing the Tractor and Demonstration session in the 2<sup>nd</sup> session.

Dr.S. Senthilkumar, MC member, SAEISS, Chief guest for the valedictory function and addressed the gathering. Dr. Siva Kumar delivered the Vote of thanks.

#### **TOPTECH PROGRAM:**



SAEINDIA Southern Section (SAEISS) conducted the Toptech program on "Tolerance Stack Up Analysis" on 23<sup>rd</sup> & 24<sup>th</sup> November 2018 at Hotel Lemon tree, Guindy. Mr. S. Shanmugam started the session with the self-introduction and he conduct the pre-test to the participants. After that he started the lecture about basics in the tolerance stack up. In the later session he explained the technology in the depth, how to create tolerance stacks using the two column method.

After the lunch on Day 1 Mr. Shanmugam started the session with the stack method, stack from and the stack spread sheet. He also explained the calculation of part stacks using coordinate dimensions, run out and concentricity, Bilateral and unilateral profile tolerances, multiple geometric tolerances, position tolerance at RFS and MMC, and datum reference at MMC.

On Day 2 the speaker started the session with lecture on straightness or perpendicularity applied to a feature of size, stacks using tolerance of position at RFS and stacks using TOP with bonus tolerance and datum shift. After lunch he started the final session with stacks using profile and TOP and the term Boundary and also gave brief explanation about special case Stack examples and he ended the 2-day session with post-test.

On the valedictory function Dr. R. Rajendran, Chairman, Engineering Education Board, SAEINDIA gave a speech about the speaker Mr. S. Shanmugam and then he distributed certificates to the participants. He also issued memento as a token of gratitude to Mr. S. Shanmugam.

#### **ADC 2019 WORKSHOP:**



SAEINDIA Southern Section (SAEISS) conducted the Aero Design Challenge (ADC) at Valliammai College of Engineering, Chennai from 22<sup>nd</sup> to 23<sup>rd</sup> December 2018. During inauguration, Dr. S. Senthilkumar, Champion, ADC welcomed the dignitaries and participants for the Workshop and also gave a brief outline about the Aero Design Challenge workshop. He also gave a talk about the importance of UAV and aero designing challenge and their roles on societal applications. Mr.C. Nandagopalan, Secretary, SAEISS Mahindra World City Division talked about the evolution of SAE and SAEINDIA and also highlighted the impact and outcome of SAEINDIA Aero Design Challenge. He motivated the students to take part in the continuous learning process through various SAE student activities. He also thanked Valliammai Engineering College for hosting the Aero Design Challenge workshop in their college and presented the memento to them.

After the basics, the students were explained about the Engineering Design and Fabrication Process of UAV by Dr. S. Senthilkumar along with Garuda Crew Members during the post lunch session on 22<sup>nd</sup> and pre-lunch session on 23<sup>rd</sup> December 2018. The students were also taught about propulsion system, avionics systems and control surfaces of UAV. All the participants learned the engineering concepts of aero design of UAV.

The students received their kits for making UAV and started their work on design and fabrication of aero model as per the instruction given by the trainers. The models prepared by the teams have been gone through pre-check before the flight test in order to have proper stability requirements. The dynamic performances of the models were depending upon the accuracy in building the aero models. They could also be able to understand and appreciate the importance of accuracy and role of each control surface for a successful flight of their models.

## **SAEINDIA Section News - Southern (SAEISS)**

#### **EGM - SAEISS:**



SAEISS conducted Extraordinary General Meeting (EGM) on 27<sup>th</sup> Oct 2018, at LEMON TREE HOTEL, CHENNAI. A new Management Committee (MC) of SAEISS for the period 2018 – 2020 was taken charge on that day.

#### **AGM - SAEISS:**



SAEISS conducted Annual General Meeting (AGM) on 15<sup>th</sup> December 2018 at Ramada Plaza Chennai.

## **SAEINDIA Section News - Western (SAEIWS)**

#### **AWIM REGIONAL OLYMPICS - SOLAPUR:**



On 13<sup>th</sup> October 2018 SAEIWS conducted AWIM Solapur Olympics at Valentine Circle English Medium School with support of N. K. Orchid School. There were total 20 (10 Jet Toy and 10 Skimmer) teams from 10 schools. The competition was inaugurated by Mr. Raja Mane, Editor of Lokmat Newspaper, Solapur. Mr. Sanjay Nibandhe, Mrs. Gauhar Kalyani, Principal, along with Trustees of Valentine Circle English Medium School were also present for the inauguration.

In the Valedictory function, Mr. Abhay Diwanji, Editor of Sakal Newspaper, Solapur was the Chief Guest. Along with him Mr. Sanjay Nibandhe, Mrs. Gauhar Kalyani, Principal, along with Trustees of Valentine Circle English Medium School, Dr. Srinivas Metan, Mr. Ramesh S. Pasarija and Mr. Kishor Chandak, Prof. Dipak Bhoge and Mr. Sagar Murugkar participated in the event.

In Skimmer category, team from Indian Public School, Kandalgaon were winners and in Jet Toy category, team from Siddheshwar Montessori School was the winners.

#### **TECH TALK LECTURE:**

On 13<sup>th</sup> October 2018 SAEIWS organised a Tech Talk Series Lectures on "Engine Emission and Testing" at N. K. Orchid College of Engineering & Technology, Solapur was jointly organized with SAEINDIA Western Section. The lectures were for final year students of Mechanical, Electrical and Electronics & Telecommunication Departments. The speakers for these lectures were Mr. Sanjay Nibandhe and Mr. Ramesh S. Pasarija from SAEIWS.



They delivered lecture on "Validation and Testing" and "Engine Emission and Current Norms" respectively. Total 110 students participated in the workshop. Prof. D. D. Bhoge worked as a Coordinator for the Workshop.

#### **AWIM MTTP - KOLHAPUR:**



On 22<sup>nd</sup> November 2018 SAEIWS conducted AWIM Master Teacher Training Program (MTTP) at KIT's College of Engineering, Kolhapur. There were 11 school teacher participants along with faculty of KIT College of Engineering for the MTTP. Mr. Sagar Murugkar was the trainer for the MTTP. Mr. Subhash Mane & Mr. Sourabh Patil also participated in the training sessions.

#### **MEMBERSHIP DRIVE:**

On 30<sup>th</sup> November 2018 SAEIWS conducted Membership Drive at Ashok Leyland at their office on Senapati Bapat Road, Pune. There were around 12 members were present for the presentation. Mr. Narahari Wagh, Mr. Ramesh Pasarija participated in the presentation and membership drive.

#### **AWIM REGIONAL OLYMPICS - PUNE:**



On 02<sup>nd</sup> December 2018 SAEIWS conducted AWIM Pune Olympics 2018 at SNBP International School, Rahatani, Pune. There were 112 students from 16 different schools who participated in the competition. The winner in Jet Toy Category was Jai Malhar School, Jambut and winner in Skimmer Category was Millennium National School.

#### **AWIM REGIONAL OLYMPICS – KOLHAPUR:**



On 07<sup>th</sup> December 2018 SAEIWS conducted AWIM Kolhapur Olympics 2018 at KIT's College of Engineering, Kolhapur. There were 80 students from 11 different schools who participated in the Competition. The winner in Jet Toy Category was Vidyamandir, Hirwade, and winner in Skimmer Category was Vidyamandir, Bachani.

#### **TECH TALK LECTURE:**



On 11<sup>th</sup> December 2018 SAEIWS organised a Tech Talk Series Lecture on "IT -2020++ and its impact on Automobiles" at ARAI, Kothrud, Pune. The speaker for the lecture was Dr. Deepak Shikarpur, Director, SEED Infotech, Director, Autoline Design Software Ltd. & Chairman, Computer Literacy Committee, MCCIA. It witnessed participation from engineers, scholars, faculty in the discipline of engineering.

M. Sanjay Nibandhe Welcomed all the participants for the lecture. Mr. Ramesh Pasarija welcomed all the participants and introduced Dr. Deepak Shikarpur.

His lecture covered following topics:

- Technical trends in IT 2018 to 2030
- Smart Devices of tomorrow (a brief video to enumerate
- Impact of Technology on Automotive professionals
- Smart Connected Vehicles
- New Careers emerging out of trends such AI, Block chain, IoT, Data Science etc.

The audience interacted with speaker during question and answers session and got an insight on these topics. Mr. Narahari P. Wagh proposed vote of thanks.

#### **SAE DAY:**



On 15<sup>th</sup> December 2018 SAEIWS conducted SAE Day – SAE Annual Day at Lekha Farms, Kiwale, Pune. The program had a session on "Diversity and Inclusion", Brain Storming Session on SAEINDIA Activities followed by Team Building activities and Dinner.

# **Supported By:**

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