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Upcoming Major Events

Dec 2015 **SINE 2015**

Feb 2016 **SIIMCE 2016**

Feb 2016 **BAJA 2016**

2016 **EFFI CYCLE**

ITEC INDIA 2015

iTEC INDIA 2015, the country's first International Transportation Electrification Conference, was inaugurated by Shri. Anant Geete, Hon'ble Minister for Heavy Industries & Public Enterprises, Government of India on August 27, 2015. The three-day (August 27 – 29, 2015) conference held at Le Royal Meridien (Chennai) was jointly organised by Society of automotive Engineers India (SAEINDIA) and Institute of Electrical and Electronics Engineers (IEEE) Industry Applications Society. The main focus of the conference was on the theme "Electrified Mobility through Holistic Ecosystem Solutions".

Shri. Ambuj Sharma, Patron of the Steering Committee for iTEC INDIA 2015 & Additional Secretary, Department of Heavy Industries, Government of India., Dr.Aravind S. Bharadwaj, President, SAEINDIA & Senior Vice President -Advanced Technology and Services, Automotive & Farm Equipment Sectors, Mahindra & Mahindra Limited., Dr. David Schutt, CEO, SAE International ., Dr.Tomy Sebastian, President Elect, IEEE Industry Applications Society (IAS) & Director of Motor Drive Systems, Halla

Mechatronics, Michigan, USA and Mr.N.Balasubramanian, Chairman, Organising Committee for iTEC INDIA 2015 & Deputy Vice President - Product Engineering, Renault Nissan Technology & Business Centre India and other members of iTEC INDIA 2015 committees were present on the occasion.

iTEC INDIA 2015 is supported by the Department of Heavy Industry, Government of India under Faster Adoption and Manufacturing of Hybrid and Electric Vehicles (FAME) scheme, a part of the National Electric Mobility Mission Plan (NEMMP) 2020, Confederation of Indian Industries (CII), Society of Manufacturers of Electric Vehicles (SMEV), Society of Indian Automobile Manufacturers (SIAM), Automotive Component Manufacturers Association (ACMA) and Society of Automotive Engineers International (SAE International).

Shri. Anant Geete, Hon'ble Minister of Heavy Industries & Public Enterprises, Government of India said, "The growth and adoption of hybrid electric vehicles will be a major component of the Government's FAME India scheme. These vehicles will reduce CO₂ emissions and fuel



SAEINDIA Managing Committee Members 2014 - 2016.

Dr. Aravind S. Bharadwaj President

Mr. Shrikant R. Marathe Immediate Past President

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Dr. Bala Bharadvaj Vice President & Chair, Aerospace Board

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Mr. M Kannan Vice Chair, Professional Development Programs Board

<u>Representing SAE International</u> Dr. David. L. Schutt

Mr. Murli M. Iyer



SAEINDIA ITEC INDIA 2015

consumption, in turn positively impacting the foreign exchange situation in the country, since 90% of our crude oil is imported. India is unique and there are huge cost and environmental challenges. Solutions which work abroad, may not work as is in India. iTEC INDIA 2015 provided the opportunity to deliberate on these technical challenges and come up with solutions required for India's future.



iTEC INDIA 2015 also saw the launch of the "Lithium" Project. Lithium is the world's first service provider with a 100% Zero Emission Electric Car fleet for Corporate Transport. Lithium provides an integrated transport management system for corporate including a fleet of connected cars manned by trained and certified drivers and supported by qualified professionals, working in the backend. A display of the latest electric vehicles was showcased during iTEC INDIA 2015 highlighting the Nissan LEAF, Mahindra Reva e₂o, etc amongst others.

Shri. Ambuj Sharma, Patron of the Steering Committee for iTEC INDIA 2015 & Additional Secretary, Department of Heavy Industries, Government of India said, "The government of India had formulated the FAME – India scheme and allocated Rs. 795 Crores for the years 2015 – 2017. This scheme will focus on four areas namely, Technology Development, Demand Creation, Pilot Projects and finally Charging Infrastructure.



Speaking at the kick-off event, Dr.Aravind S. Bharadwaj, President, SAEINDIA & Senior Vice President – Advanced Technology and Services, Automotive & Farm Equipment Sectors, Mahindra & Mahindra Limited said, "The Government of India has set the challenging goal of achieving 6-7 million sales of hybrid and electric vehicles year on year from 2020 onwards. While monetary incentives and investments are important to realize this ambition, technology innovation and advancements are even more crucial at this stage to shape the growth trajectory of electro mobility adoption in the country".

Dr.David Schutt, CEO, SAE International in his speech complimented SAEINDIA for organizing the 1st International Transport Electrification Conference in India with IEEE IAS and assured the support of SAE International in carrying out such trend setting programs as Electric Mobility is going to occupy a significant place in mass mobility in future.



Dr.Tomy Sebastian, President Elect , IEEE Industry Applications Society (IAS) & Director of Motor Drive Systems, Halla Mechatronics, Michigan, USA said, "Cooperation of SAE whose focus is on mobility systems and IEEE which is the largest professional association for the advancement of technology focused on electrical and electronic technologies is probably the most efficient way to address the technical challenges associated with the integration of Electrical Technologies into automotive systems".



Mr.N.Balasubramanian, Chairman, Organising Committee for iTEC INDIA 2015 & Deputy Vice President - Product Engineering, Renault Nissan Technology & Business Centre India said, "Individual mobility of the future will be greener, intelligent and partnership oriented. India has opportunities both as a manufacturer as well as an early adopter of hybrid and electric technology. iTEC INDIA 2015 is being organised to encourage sharing of knowledge, best practices and case studies, both technological and organisational, to propel India's fledgling Electro Mobility Industry".

He also expressed his gratitude to Ministry of Heavy Industries, Government of India for having supported in conceptualising this first of its kind conference in India. He also thanked the delegates and the participating companies for coming together for the conference.



The conference addressed technical interests related to the electrification in the transportation sectors including but not limited to, electric cum hybrid vehicles, plug-inhybrid vehicles, aeronautical, rail road and off-road vehicles. iTEC INDIA 2015 also had an array of papers across different topics. In addition the event comprised panel discussions, short courses and tutorials, presentations, exhibition, ride and drive of electric vehicles besides, being kept on display. About 80 technical papers were presented at the conference by participants including from 7 countries.





The conference covered the topics including Power Electronics and Electric Motor Drives, electric Machines, Sensors and Actuators, Battery and Battery management System, electric, Hybrid Electric, Plug-inhybrid vehicles, Electric Vehicle System Architectures, Smart grid, Electrical Infrastructure and V2G, Autonomous Vehicles, V2V Communication and ICT, Fuel Cell applications in Transportation, Electrical Systems and Components for Sea, Undersea, Air, Rail and Space Vehicles.

The 3-day conference featured an exceptional line-up of speakers including Dr. Mahesh Krishnamurthy, Illinois Institute of Technology; Mr. Patric Mccarren, ED, IEEE IAS, USA; Mr. Michael Poznanski, CTO, Volkswagen India; Mr.Naritomo Higuchi, Honda R & D, Japan; Mr. Brian McMurray, Director, General Motors; R.K.Shenoy, Sr.V.P. Robert Bosch; Mr.Stevan Dom, Manager, Siemens; Mr. Wensi Jin, MathWorks; Mr. Mahesh Babu, COO, Mahindra Reva; Mr. I.V. Rao, Executive advisor, MSIL; Dr. Chalasani Rao, Director (Retd) General Motors; Mrs. Rashmi Urdhwareshe, Director, ARAI.

The event was sponsored by Department of Heavy Industries, Bosch, Maruti Suzuki India Ltd (MSIL), Siemens, Automotive Research Association of India ARAI), Ansys, Altair, Continental Automotive Components India Limited and MathWorks. The various Exhibitors who exhibited the event are Comsol Multiphysics Pvt. Ltd, Automotive Test Systems (ATS), Autocar Professional, Autotech Review, Lohia Auto Industries, Mahindra Reva Electric Vehicles Pvt. Ltd, TVS Motor Company, St. Peter's University and Satyam Venture Engineering Services Pvt. Ltd.



The conference also featured a Young Professional Program where the students and young professionals got an opportunity to discuss issues and opportunities with Industry and Academic Leaders and Entrepreneurs and the program was moderated by Prof. Akshay Rathore.

Dr. Rajan Wadhera, Chief Executive and President of Truck & Power Train Division, and Head of Mahindra Research Valley (MRV) at Mahindra & Mahindra Ltd was the Chief Guest at the valedictory function and stated that ITEC INDIA 2015 Conference also offered an excellent platform for exhibitors to showcase their products, technologies and services to the important players of the mobility industry. It also provided the OEMs and suppliers a perfect venue to display and demo the advanced technologies in their vehicles so the techsavvy audience could touch and feel and live the

experience. The Conference has channelized innovative minds from the global automotive community to congregate and exchange ideas. Going forward, innovative design concepts will lead the way towards sustainable, safe, and connected vehicles, in line with ever changing customer demands and loyalty.



He also announced that the 2nd iTEC INDIA will be organised in AUGUST 2017 in ARAI Campus in PUNE, India.

International Seminar on "Vehicle Dynamics"

The first International webinar & seminar by Dr.Thomas Gillespie was held from **9th to 11th July, 2015**. The event was held for the faculty advisors at Amrita university, Coimbatore and was transmitted live to 6 locations for students. The six locations were PSNA -Dindugal, SRM -Chennai, PES-Bangalore, MVSR - Hyderabad , MIT - Pune and KIIT - Bhubhaneswar.

The members of the Engineering Education Board (EEB) Prof.P.B.Joshi, Prof.Kannan Rajendran, and Prof.Leenus were the coordinators at Pune, Dindugal and Chennai and the Division Chairman of Hyderabad Dr.G.Padmanabham along with Dr.Gururaj.T had supported the initiative at Hyderabad.



EEB had contacted KIIT for hosting it at Bhubhaneswar with Prof.Isham coordinating the program. The live streaming was done by using A-View; software developed by Amrita and used extensively by IIT Bombay for their E-learning and MOOC initiatives and technical support was rendered by the E-learning Initiatives team from Amritapuri and Coimbatore. About 450 students and faculty members attended the programme.



The event was inaugurated by Dr.Aravind Bharadwaj, President of SAEINDIA through skype and was streamed live to all the six locations.



Dr.Thomas Gillespie answered questions live from the various locations. The feedback from this programme was very encouraging and EEB will be planning further programmes with Domain experts.



SUPRA SAEINDIA 2015

Applying the power of ingenuity SUPRA SAEINDIA 2015. The untiring participants on the track of MMRT, Chennai. SUPRA SAEINDIA 2015 was an exciting design competition conceived to instil and harness talent, honing the skill of engineering students from all over India. Students from various colleges form teams and create a virtual design, build a prototype, and test their own Formula-type race car. The project fuels the exuberance of the youth by providing teams a platform to test their mettle, giving them pragmatic exposure to real-world challenges as faced in industry. The event happened from 16th to 19th, July 2015, at MMRT (Madras Motor Race Track) in Chennai.



The challenge for the participating engineering students is to constantly innovate and bring about changes for reduction in weight, fuel economy and increased efficiency in transmission. The students are guided and mentored by industry professionals and faculty advisers who are imparted training and guidance by technical experts of SAEINDIA. The 4th edition of SUPRA SAEINDIA was inaugurated by Mr. Subu D Subramanian, MD & CEO, Hinduja Tech Limited on 16th July 2015 at Madras Motorsport Race Track. 2200 Engineering students in 110 teams compete to design a Formula prototype car. Nearly 100 Judge from Industries as well as Motorsports came to judge the vehicles on a proven matrix and well settled criteria.

Speaking on the occasion, Mr. Prashant K. Banerjee, Convener, SUPRA SAEINDIA 2015 & Head -Homologation and Product Evaluation, Tata Motors Ltd. said, "It gives us great satisfaction to see that over the years teams are maturing, which is now showing in some of the very impressive prototypes that they have brought here. We hope this event will continue to enable these bright young engineers to discover their passion for automotive engineering and motivate them to choose it as their career."



About 91 teams registered on the first day and had undergone all static and dynamic tests. Finally about 9 teams qualified for the endurance test.

The Event came to an exciting close on 19th July afternoon. Mr. C. V. Raman, Executive Director -Engineering Research, Maruti Suzuki India Limited was the Chief Guest at the Valedictory Function. Ms. Rashmi Urdhwareshe, Director, ARAI; Dr. Aravind S. Bharadwaj, President, SAEINDIA & Senior Vice President – Advanced Technology and Services, Automotive & Farm Equipment Sectors, Mahindra & Mahindra Ltd.; Mr. Prashant K. Banerjee, Convener, SUPRA SAEINDIA 2015 & Head -Homologation and Product Evaluation, Tata Motors Ltd.; Mr. Sirish Vissa, Technical Committee Chair, SUPRA SAEINDIA 2015 & Head - Volkswagen Motorsport India; and other office bearers and members of SAEINDIA were present on the occasion.



Mr. C. V. Raman, Executive Director, Engineering, Maruti Suzuki India Ltd. said, "We had first collaborated with SUPRA SAEINDIA in 2011 for this competition to encourage budding talent in motorsports and engineering. To conceptualize, design, fabricate and run a Formula prototype car from start to finish, provides an immense opportunity for hands-on experience. Being the market leader, Maruti Suzuki has always paid extra attention to engineering and we will continue with our initiatives to provide students the right kind of exposure to further polish their engineering skills. I believe that there is an abundance talent pool in our country. So I hope to see more students participating and gaining as much experience as possible from these events to develop their abilities from the opportunities that lie ahead."



Maruti Suzuki India Limited is and has been the Title Sponsor of the event right from the first edition. Other sponsors include BPCL, who have offered to exhibit these vehicles at their network across the country, Altair, ANSYS, ARAI, Bosch, Continental, Viper Hobbies, Roots & Canara Bank.



OVERALL		
1	INVINCIBLES	KRISHNA INSTITUTE OF ENGINEERING & TECH
2	TEAM HAYA	PES INSTITUTE OF TECH.
3	HERMES RACING	KIIT UNIVERSITY



Virtual ELECTRA SAEINDIA

SAEINDIA is please to inform that the society is taking up new initiative to promote technologies that support Ecofriendly vehicles in India.

ELECTRA SAEINDIA will focus on Electric Vehicle Technology exploration & evaluation for the students of the Engineering Institutes all over India. This event provides a real world engineering challenge for the SAEINDIA Student members that reflect the steps involved in the entire process from design and engineering to production to marketing and endurance testing of an Electric vehicle (Two Seater). The Virtual ELECTRA- a First Edition for ELECTRA took place on 28th of August 2015 at Le Royal Meridien, Chennai Rule book of ELECTRA SAEINDIA was launched by Honourable Minister of Heavy industries Shri. Anant geete.



According to Dr. S. Thirumalini (Chair-Engineering Education Board, SAEINDIA) SAEINDIA Electra competition is a great idea to induct the students to work on emerging technologies since India has a mission plan to promote the manufacture and usage of Electric vehicles. The participating students will have the ability to think ahead in terms of the requirements for an EV Eco system since the requirements are unique and solutions need to be innovative.



14 Teams registered and 9 participated in this event, Team Taiyo Zen from Hindustan University, Chennai stood 1st and Team Drag Demons from Sri Krishna College of Engineering Technology, Coimbatore took the 2nd place.



Chair EEB with Electra virtual judges and officer CDS.

VIRTUAL BAJA SAEINIDA 2015

The Virtual BAJA SAEINDIA 2015, hosted at Chitkara University, Chandigarh, on 10th&11th July 2015, set the stage for yet another season of pure and unadulterated off-roading enthusiasm. With about 370 teams coming in from across the country, one could feel the air charged with anticipation and passion. A total of 60 industry experts and BAJA organizing committee members supported the event as judges/panelists, evaluating the teams on their ATV design.

This time Virtual BAJA SAEINDIA also saw the introduction of a new format. A written test was added to the evaluation criteria, with equal weightage given to the written test and presentation.



The event was flagged off by many prominent members of the automotive industry - Prof. Sudhir Gupte from ADIT Engineering Institute(Convener –BAJA SAEINIDA 2016), Dr. K C Vora from ARAI, Mr. Subodh Morye, Mr. P S Nitish and Mr. Shoiab Sadiq from Mahindra and Mahindra. They were accompanied by Wing Commander R S Gill from Chitkara University. The dignitaries started the inauguration ceremony by lighting the auspicious lamp, and sharing their thoughts on the occasion.P S Nitish (Convener, Virtual BAJA SAEINDIA 2015) briefed students about the upcoming 2 day event, and what they have in store for this year's redesigned Virtual BAJA SAEINDIA 2015.



Ms. Srishti Prasad, of University Institute of Engineering and Technology, Punjab University, was felicitated for suggesting the theme of "**Passion to Podium**" for BAJA SAEINDIA 2016. She was awarded with a cash prize of INR 5000/-



One of the highlights of the inauguration ceremony was the unveiling of the first edition "BAJACME", the BAJA SAEINDIA Newsletter by all the dignitaries present. The initiative, taken up by the BAJA SAEINDIA Alumni Committee, is aimed at offering its readers access to the passionate and adventure of the world of BAJA and offroading. Chitkara University, the host of the event, arranged a cultural extravaganza on DAY 2, for all the attending team members, judges, organizing committee members and alumni committee members. The students of Chitkara University performed a skit and ended the night with an energetic dance performance, where all judges and organizing committee members were invited



on stage to perform with the students



In the end **Mrs. Madhu Chitkara,** Vice Chancellorof Chitkara University, expressed her pleasure in hosting this event, and similar such events in the future. Mrs. Chitkara and other dignitaries from Chitkara University presented the judges, organizing committee members and alumni committee members a memento as a token of appreciation.

In the end, Mr. Vinay Mundada, appreciated the support received from the University and all the student volunteers, crediting them with the success of the event.

SAEINDIA Western Section Office was inaugurated

SAEINDIA Western Section Office was inaugurated by Dr. Richard Greaves, President SAE International in the presence of Dr. Aravind Bharadwaj, President SAEINDIA & Mrs. Rashmi Urdhwareshe, Chairperson, SAEINDIA Western Section & Director ARAI on 31st July 2015, at Pune.

The event flow was as follows:

• Welcome Address by Mrs. Rashmi Urdhwareshe, Chairperson, SAEIDIA WS.



- Student perception about SAEINDIA by Mr. Pratik from MIT, Pune.
- Address Mr. Murli Iyer, Executive Global Advisor SAE International.
- Address by Dr. Aravind Bharadwaj, President SAEINDIA.
- Introduction of Dr. Richard Greaves, President SAE International by Mr. Narahari P. Wagh, Secretary SAEINDIA WS (SAEIWS).
- Inauguration of SAEIWS Office & Inaugural Address by Dr. Richard Greaves, President SAE International.
- Vote of Thanks by Mr. G. Vijayan, Deputy Director General, SAEINDIA.

Make in India-Transformational Driver for Aerospace & Defence Industry

SAEINDIA Aerospace Board organised a Conference on "Make in India-Transformational Driver for Aerospace & Defence Industry" on 29th July 2015 at Sterlings Mac Hotel, Bangalore under the leadership of Dr. Dr. Bala K Bharadvaj, Chair - SAEINDIA Aerospace Board & Leader of Engineering & Technology, Boeing India. Dr Richard Greaves, President SAE International & Meggitt PLC's CTO Emeritus delivered the Presidential Address and Mr. Sudhir Kumar Mishra, Chief Executive Officer & Managing Director of BrahMos Aerospace was the Chief Guest at the Conference.



The main objective of this conference was to unravel the challenges and myths about "Make in India" theme for Indian Aerospace & Defence Industry and lay the road map for the future. This event was well organized and brought Aerospace & Defence leaders from the Government, Industry and Academia in one platform to network and share their experiences and success stories for the benefit of the Aerospace fraternity in India.



Senior Leaders from Boeing, Airbus, GE Aviation, Honeywell, Safran, UTAS, ISRO, DRDO, HAL, Godrej Aerospace, L & T Aerospace, Infosys, Data Patterns and KPMG spoke on the challenges and opportunities posed by the "Make in India" campaign which can be a transformational driver for the Aerospace & Defence industry.

SAEINDIA Foundation Annual Awards

The 3rd Annual Awards Function of SAEINDIA Foundation was held on 3rd August, 2015, at India Habitat Centre, New Delhi. The awards were given to recognize & motivate young Women Engineering Students, Working professionals, SAEINDIA Section Champions, Institute & to honor our Gurus and Mentors for their contribution to mobility community at large. Mr. Vijay Chhibber, Secretary, Ministry of Road Transport & Highways was the Chief Guest, Mr. Ramesh Suri, President ACMA & Chairman Subros Limited was the Guest of Honor and Dr. Richard Greaves, President - SAE International was the Special Guest at the occasion.

Mr. R Dayal, President, SAEINDIA Foundation welcomed the guests and apprised them about the activities of the Foundation and the objective of the SAEINDIA Foundation Awards. From this year onward "Corporate Award" has been instituted to award corporate/university/association for their outstanding contribution in promoting SAEINDIA activities. More than 120 invitees and guests from the Industry, Government, Academics and Media attended the Annual Awards Function of SAEINDIA Foundation.







Mr. Vijay Chhibber delivered the key note address. His talk was inspirational and motivating for all who were present. He started with paying a homage and observing silence as mark of respect to formal President of India Dr. Abdul Kalam. He focused on road safety & reminded the responsibility of all stake holders to work towards minimizing causalities happening on Indian roads. He appreciated the efforts of SAEINDIA Foundation in awarding the students, faculty members & professionals from the Industry. He further shared and emphasized that students are the building blocks of the nation and any step taken in improvement of their skill would definitely provide the right path for the nation's development.

Mr. Ramesh Suri appreciated the efforts of SAEINDIA Foundation in recognizing students, Faculty & Corporates for their contribution in the field of mobility. He assured of greater participation

SAEINDIA

Dr. Richard Greaves praised the activities of SAEINDIA during his visit and interaction at all sections. He was keen to promote Aerospace Engineering in India and announced a donation of USD 10,000 to SAEINDIA Foundation for providing recognition to extra ordinary efforts put in the field of Aerospace.

Mr. Murali Iyer emphasized support of SAE International to SAE activities in India and shared that next Board meeting of SAE will be held in India. Vote of thanks was proposed by Mr. I V Rao, Past Chairman, SAENIS. He summarized the event and thanked the contributors who had contributed for the Awards and for the conduct of the event.

AWIM MASTER TEACHER TRAINING PROGRAMME

SAEINDIA Western Section in association with ARAI and sponsors Eaton Technologies, John Deere & Cummins India conducted 'A World In Motion' (AWIM) Master Teacher Training (MTTP) program for teachers from various schools from Pune and volunteers of sponsoring companies. The AWIM is competition for school students of 5th & 6th Standard who work as a team, applying scientific design concepts and exploring the principles of laws of motion, inertia, force, momentum, friction, air resistance, jet propulsion, etc. to create moving vehicles like skimmer and balloon powered Jet-Toy cars. Mr. Saurabh V Chitnavis, Mr. Manoj Girhe & Mr. Rahul Gujar worked along with Conveners of AWIM Pune Olympics 2015 for the Teacher Training





program. Mr. Kiran Patil, Ms. Mrunmayee Pujari, and Mr. Yatin Jayawant conducted the training. The Training was attended by all the teachers and volunteers from Pune city as well as some Mumbai volunteers, from Chandigarh and Mumbai.

SAEINDIA OFF-Highway Leadership Enclave

SAEINDIA Off-highway board organized one day program on Leadership Enclave at Pune on 30th July 2015 with the theme "Role of off Highway Industry in Smart Cities and Digital India".

The highlight of the event was the panel discussion by eminent leaders from off highway industry on the theme and talk by SAE International President, Dr. Richard Greaves.

Dr. Richard Greaves and Mr. Murali Iyer, Executive Global Advisor , SAE International talked about the role of SAE in building Off Highway Industries and thereby making smart cities for the future. They also spoke about the SAE Foundation and SAE International commitment to help these and newer initiatives ahead along with the Off Highway board.



Vote of thanks was proposed by Mr. Amar Variawa, Secretary SAEINDIA Off highway board.



CXO CONCLAVE 2015

SAEINDIA Aerospace Board organized CXO Conclave 2015, which was well attended by CXO's of various aerospace companies.



President of SAEINDIA Dr. Aravind Bharadwaj gave an introduction on SAEINDIA & its activities. It was then followed by Dr. Bala Bharadvaj highlighting on the type of membership to be availed like Diamond, Platinum, and Gold for the companies / industries, play a pro-active role in programs and events of Aerospace Board this event was organized in the Lee-Meridian Hotel Bengaluru on 04th September 2015.



It was followed by an impressive presentation on aerospace Board and its activities since its formation in December 2009.

He listed options to become Patron Member to develop strong Eco system for advancement of Aerospace community of professionals.

PRESIDENTIAL POLICY DEPLOYMENT MEET 2015 – 2016

SAENIS hosted the Presidential Policy Deployment Meet 2015 - 2016 at Gateway Damdama, Gurgaon, Haryana from 12th to 13th September 2015.

45 Delegates from SAEINDIA, Sections and Various Operating boards have attended the 2 day conference. Various priorities, issues and improvements ideas were discussed during the meet.

6 teams were formed to discuss and decide actionable ideas for the most important priorities of SAE India. These were:

- Proposal for Improving Membership
- Meeting & Exposition board- future role
- Training Contents
- Training Delivery
- Restructuring SAE India Office & Infrastructure,
- SAE India Branding



The Meet concluded with SAE India MC meeting, where the actionable items of the above 6 teams were put up as resolutions and guidance/ approval of the MC was accorded to work on them further for implementation.

Bangalore Section

National seminar on renewable energy resources

Mr. K P Murthy Vice chairman representing SAEINDIA BS, in National Convention of Mechanical Engineers & National Seminar on Renewable Energy - 2015. He spoken on Renewable energy resources. The event was well attended by both Professional & student members from the Institution of engineers and SAEINDIA. This event was organized by the Institution of Engineers India at the Atria hotel Bengaluru.



Tech talk in honey well technologies

A technical talk was presented by Dr. Prashanth Ravi of Caterpillar INDIA, "On high density diesel engine development", in the honeywell R&D centre Bengaluru. This was the promotional activity done from the SAEINDIA BS, to bring more mobility practitioner

Section News

from the professional side to the SAE forum. It was well attended and was video streamed across all the honeywell centre's Bengaluru & Pune. The event was organized by Honeywell technologies.



SAEINDIA club inaugural CHRIST Collegiate

New set of office bearers from Christ university collegiate club Bengaluru, took the responsibility for the academic year 2015-16. The club was Inaugurated by Mr. K.P. Murthy Vice chairman of SAEINDIA Bangalore section, dignitaries present were Mr. G K Venkatesh, General manager for Automotive Solutions, Robert Bosch India Limited, Dr. G S Hebbar -Coordinator, Dept. of Mech. Engg, Christ University & Mr. N. Ram Kumar - Faculty Advisor, SAEINDIA Christ Collegiate Club, Christ University. The event was well attended by the SAEINDIA student members of Christ University.



Facilitation to Dr. Richard Greaves, President of SAE International

Mr. Munirathnam Javaji, SAEINDIA Bangalore section Chairman, offered facilitation to Dr. Richard Greaves. President of SAE International, followed by a video presentation on Section activities, which showcased during the major programs and eventBreakfast meet. Also, on upcoming section activities from Bangalore i.e on 2 Wheeler hybrid E- Vahan & Aero event as Vayuyan. The meeting was well attended by the representatives from various companies of Automotive, Off highway & Aerospace Sectors.





National seminar on Rail & Road safety:

NDRF (Research wing of institution of engineers) in association SAEINDIA Bangalore section had recently organized an national seminar on "Rail & Road safety" in NIMHANS convention centre Bengaluru. The event was well attended by the dignitaries from the National railway board & from the automotive industry. Bangalore Section members present were Mr. Munirathnam Javaji – Chairman, Mr. KP Murthy Vice chairman. Mr. Kannan Secretary and Dr. Manish jaiswal.

GITAM UNIVERSITY collegiate club inauguration

A new chapter in the GITAM University started its first SAEINDIA Collegiate club, which was inaugurated by Mr. K.P. Murthy vice chairman, SAEINDIA Bangalore section. Followed by the dean & H.O.D mechanical engineering department of G University the event was well attended by 150+ students & the department faculty.



Mr. Murthy addressed the student's community on taking up the competition activities of SAEINDIA in upcoming days.

Northern Section

EFFICYCLE 2015

The 6th edition of SAENIS Efficycle 2015 event was organized as "Efficycle-Light Weight Season" with the theme "Using the light weight technologies to make lighter, durable and highly efficient cycles but without compromising safety". The event was conducted at 2 zones Ghaziabad (1st Round) and Indore (2nd Round).

The First round of SAENIS Efficycle 2015 event was conducted at KIET, Ghaziabad from 4th to 5th July 2015. Total 59 teams participated and there were 5 Judging panels of 4 judges each from companies namely MSIL, ICAT, ABB Electric, Lumax, NSCT, SPX Cyden Pumps, IOCL etc.

Shri. Atul Garg (Management Trustee-KIET), Dr. S.P. Mishra (VC-Dev Sanskriti University and Advisor-Krishna Group), Shri. U.D.Bhangale (Sr. GM-ICAT & Convener Efficycle-2015), Dr. Reji Matahi (Chief Research Manager-IOCL and Coconvener, Efficycle 2015), Dr. K.L.A. Khan (HOD-Mechanical-KIET) were present during the Inaugural ceremony. After the lamp lightening ceremony, Shri U.D.Bhangale welcomed all the participants, faculty advisors and judges from the automotive industry. Dr. S.P. Mishra and Shri. Atul Garg enlightened the with participants their motivational talks.



The event proceeded with the Students briefing and Judges briefing by Mr. Jitendra Singh Gaur (Technical Committee Coordinator) in which the participants were explained about the evaluation procedures. Judges were briefed about the rulebook criteria, evaluation parameters etc.

On Day 2 of the First Round the participants were briefed and the presentations were made as per the schedule. After all the presentations, valedictory session was organized. The judges' efforts were recognized by the Organizing committee and Shri. U.D.Bhangale presented the "Certificate of Appreciation" and Mementos to all the judges on behalf of Chairman, SAENIS and the whole organizing committee. Event was concluded with the vote of thanks by Convener Shri. U.D. Bhangale. The Second round of SAENIS Efficycle 2015 event was conducted at CDGI, Indore from 11th to 12th July, Total 84 teams participated and there were 6 Judging panels of 3 judges each from companies namely MSIL, ICAT, Lumax, IOCL, John Deere, Volvo Eicher Commercial Vehicles, Mahindra 2 Wheelers and NATRAX (under NATRiP).

Shri. K.S. Jairaj (Registrar-CDGI), Mr. D.R. Phalke (HOD Mechanical-CDGI), Shri. U.D.Bhangale (Sr. GM-ICAT & Convener Efficycle-2015), Dr. Reji Matahi (Chief Research Manager-IOCL and Co-convener, Efficycle 2015), Mr. S. Saifee (Sr. Manager-Mahindra 2 Wheelers) and Mr. Ashit Jha (GM-MSIL) were present during the Inaugural ceremony. Lighting the lamp Shri U.D.Bhangale welcomed all the participants, faculty advisors and judges from the automotive industry. Mr. K.S. Jairaj and Mr. S. Saifee enlightened the participants with their motivational talks. The event proceeded with the Students Briefing and Judges briefing by Technical Committee and a separate session conducted by M/s Siemens, the students were informed about the CAD/CAE practices.



On Day 2 of the Second Round the participants were briefed and the presentations were made as per the schedule. The judges' efforts were recognized by the Organizing committee and Shri. U.D.Bhangale (Convener), Shri. Jitendra Malhotra (Coconvener), Dr. Reji Mathai (Coconvener) and Prof. C.N.S. Murthy (Dean-CDGI) presented the "Certificate of Appreciation" and Mementoes to all the judges on behalf of Chairman, SAENIS and the whole organizing committee. Event was concluded with a vote of thanks by Convener Shri. Jitendra Malhotra.



Simulation Drive Design for Automotive Product Development

The Engineering Society For Advancing Mobility Land Sea Air and Space

SAENIS and MSC Software collaborated to organise a seminar on 'Simulation Drive Design for Automotive Product development'. The seminar covered the use of CAE simulation to reduce NVH, improve durability and life and perform subsystem level simulation for automotive components and subassemblies. The seminar also introduced engineers to the next generation CAE technology and how the new technology could significantly reduce product development time by bringing simulation upfront in design stage. Various examples and case studies were discussed to understand how global automotive industry is using such methods to their advantage.

The inaugural note was delivered by Mr.Deepak Katyal, Vice President-Maruti Suzuki India Limited. This was followed by a session on Introduction on FEA analysis. In this, weight optimisation techniques, techniques for reducing noise and vibration in the design stage and durability were discussed.

SAE International President Visit

On 4th August'15, SAENIS organized an event in Tagore International School, Delhi in which President of SAE International and other SAE top members came together and interacted with the AWIM participants.

SAE International President Dr. Richard Greaves honored the school students with his gracious presence. Accompanying Mr. Greaves were many other respected names in the field of technology - Mr. Murli Iyer -Executive Advisor Global Affairs (SAE International), Mr. Alok Jaitley -Convener, SAENIS AWIM & Vice Chairman Student competition & Vice president MSIL Engg (Body Design), Mr. Rakesh Sood – Vice **Chairman Student activities SAENIS** & MD of M/S Trim India, Mr. Anup Kacker – Executive Director, SAE NIS and Mr. G.Vijayan, Deputy Director General of SAEINDIA.

The day started with the welcome note from the Head Mistress of Tagore International School, Mrs. Madhulika Sen followed by the melodious School prayer. Next Dr. Greaves explained the purpose behind the initiation of AWIM event.



He also mentioned how AWIM is creating scientific and technological awareness in junior school students. Dr. Greaves and Mr. Iyer interacted with the school students, encouraged them to become Engineers, scientists and explained how there is plethora of opportunities for the young students in the field of technology.



The school children presented their journey in AWIM till now and also demonstrated few of their jet toys and skimmers, overwhelming the audience with their talent.

SAE International Presidential Visit to MSIL

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Dr. Richard Greaves, President and Mr. Murli Iyer, Executive Advisor (Global Affairs) - SAE International visited MSIL, Gurgaon on 3rd Aug'15.



Mr. CV Raman (EO-Engg) along with Mr. IV Rao (Executive Advisor), Mr. R Dayal (Sr. Advisor-Gujrat Project) and team welcomed them and provided an overview of Maruti Suzuki. They also visited our Gurgaon Plant and appreciated the facility.



Phagwara for Hosting Efficycle 2015

Society for Automotive Engineering-Northern India Section(SAENIS) and Lovely Professional University have collaborated to host SAE India's ecofriendly national event 'EFFICYCLE 2015' in October 2015. Effi-cycle is annual national event which is to promote renewable and alternative energy usage. During the event, a huge participation of 101 studentteams from across India will showcase students' vehicle mobility expertise.



SAENIS Executive Director Anup Kacker and LPU Chancellor Mr. Ashok Mittal signed MoU in this regard. Chief Research Manager of Indian Oil Corporation Ltd Dr Reji Mathai and International Centre for Automotive Technology representative Mr. H Singh witnessed the collaboration ceremony. Starting from Diesel engines and the present day Hybrid engines, automotive have always been a touchstone of a society's progress. SAENIS in a similar endeavor presents a new milestone in the realm of "Green Technology" -SAE Effi-cycle competition. Students are required to design, simulate and fabricate a highly efficient human powered vehicle that is aerodynamic Mr Anup Kacker elaborated: "EFFI-CYCLE (Efficient-Cycle) event will make students compete by presenting vehicle of three wheelconfigurations. This vehicle with seating capacity of two passengers is to be powered by human-electric hybrid power. The objective is to promote innovation and generate consciousness amongst young engineers towards environment friendly mobility solution.

LPU Chancellor Mr Ashok Mittal informed: "This collaboration will bring more brilliant results for the innovative students in the section. I feel proud while sharing that our university is already having a very efficient SAE Collegiate Club-LSCC at its campus"

SAENIS AWIM MTTP 2015

SAENIS on 22nd August 2015 inaugurated the AWIM 2015 chapter by successfully conducting the MTTP at Mapple Emerald for Delhi NCR region.

Mr. Alok Jaitley, (Vice Chairman Student Competition, SAE NIS & Convener AWIM SAENIS) and Mr. Rakesh Sood's (Vice Chairman Student activities –NIS & exconvener AWIM SAENIS) presence



was imperative for making AWIM a success.



Over 77 schools from Delhi, Gurgaon and Faridabad along with volunteers from IGDTUW, Jamia University, DTU, NSIT and NIEC participated in the event.

Both the Skimmer & Jet-toy sessions were simultaneously conducted and started out with a brief introduction of the trainers, teachers and volunteers. Following the brief, motto and significance for today's building intellectuals, fabrication of Jet-Toy and Skimmer was finally led off by the respective trainers. Post lunch, innovation was at its peak during fabrication time & various tips and suggestions were constantly rendered by the trainers.



Southern Section

Toptech - Quality Function Deployment

Toptech program on "Quality Function Deployment " was organized by SAEINDIA Southern Section on 23rd & 24th June 2015 at Radha Regent Hotel, Chennai Speaker: Shri. S. Selvamani / Consultant, Product Development Process and Design to Cost. Supported : Shri. S. Shanmugam / Managing Director Design Desk (India) Pvt Ltd and Secretary of SAEISS. 10 Non-Members & 3 Members - Total 13 Participants

Speaker - Mr. S. Selvamani, Consultant, Product Development Process and Design to Cost

Program Objective: Introduction of QFD and related tools Different variants of QFD and their application Real time case study: Customer voice collection Competitive benchmarking Engineering benchmarking



Toptech - FAILURE MECHANISM AND PREVENTION

Toptech program on "FAILURE MECHANISM AND PREVENTION IN AUTOMOTIVE COMPONENTS" was organized by SAEINDIA Southern Section on 10th & 11th July 2015 at Radha Regent Hotel, Chennai Speaker: Dr. R. Rajendran / Professor- B S Abdur Rahman University, Chennai & Mr. S. Shanmugham / WABCO INDIA Ltd.



Course Objectives

Identify potential failure modes for an engineering component and deduce the loading types, material, environmental and structural properties, which govern the onset of failure.
Predict brittle, ductile, fatigue and buckling failure loads for a

range of engineering components.

• Recognize indicative facets of a failed component from which can be inferred the source of failure.

 Understand examination of failed components, suggest likely causes of failure and suggest strategies for testing out the failure mode hypothesis.

Toptech - Automatic Transmissions

Toptech program on "FAILURE MECHANISM AND PREVENTION IN AUTOMOTIVE COMPONENTS" was organized by SAEINDIA Southern Section on 21st & 22nd August 2015 at Radha Regent Chennai

Speaker: Shri. R. Venugopal, DRDO Fellow, Shri. M. Khader Basha, Scientist 'G', Mrs. V. Uma, Mr. M. RAMESH KUMAR, Scientist 'E'.

Course Objectives

Many modern cars, buses, trucks, off highway vehicles, mining equipment, and military vehicles use Automatic Transmissions. The driving comfort and improved life of drive train components by the use of automatic transmissions is attracting the attention of vehicle users as well as vehicle manufacturers. Automatic transmissions offer ample opportunities to practicing engineers in various fields of product development.

All executives irrespective of their involvement in different phases of product development cycle will benefit from this course

Toptech - International Material Data System

Toptech program on "**International Material Data System**" was organized by SAEINDIA Southern Section on 28th & 29th August 2015, Friday & Saturday HOTEL RADHA REGENT, Chennai. Speaker Mr. M. Prabhakaran Consultant, Wafes Technologies

Course Objectives

The participants are introduced to the growing legal requirement and the training session will discuss in detail about the obligation under the ELV directive and its target set by EU with regards to the material declaration, recycling target based on ISO 22628, Type approval & Sustainability in the automotive industry.

For those who are new to International Material Data System (IMDS) system and for those who are struggling with data fields and complexities of the IMDS system, the training will enhance the participants understanding of IMDS system and how the product data will flow through the system. The participants will be familiar with the concepts and definitions of the IMDS and they will know how to create their product data sheet in the system.



International President Visit

Dr. Richard W. Greaves / SAE International President Visited in July 2015 in India. SAEINDIA Southern Section Chairman welcomed our SAE President and Section Management Committee Member gave the Vision & Mission of SAEINDIA Southern Section.





Western Section SAEINDIA WS Project Competition 2015

SAEINDIA Western Section, in association with Vishwakarma Institute of Technology Collegiate Club, Pune organized an "Inter College Project competition" for the final year engineering students of all the SAE Collegiate Chapters in the Western section. This year the Project Competition was held at the Vishwa karma Institute of Technology, Pune on 31st July 2015 as a part of SAE Day celebrations. The competition was inaugurated by Dr. Richard Greaves, President, SAE International, in the presence of Mrs. Rashmi Urdhwareshe, Chairperson SAEINDIA Western Section & Director ARAI, Mr. Murli Iyer, Executive Advisor Global SAE International, Mr. Prakash Sardesai, Vice Chair SAEINDIA Western Section, Mr. Narahari P. Wagh, Secretary, SAEINDIA Western Section.



The competition was based on following points:

 The competition was open for students from colleges having SAE Collegiate Chapters who have graduated in the academic year 2014-15. These students presented their final year projects at the competition.
 The projects were related to automotive industry.

3) The shortlisted projects were presented before a panel of judges.
4) Each participating team was allotted total time duration of 20 minutes for their presentation.

5) The Awards were announced in the SAEINDIA Western Section Annual Social held in the evening same day at ARAI

- 1st prize of Rs.10000/- along with Rolling trophy with certificates was awarded to team from Ramdev baba College of Engineering, Nagpur and their project was "Three Wheeled Foldable Moped". Team Members of this project were Aditya Ganjapure, Mangesh Deshpande, AngadSingi, PalashKawale.

 2nd prize of Rs.7,000/- along with a Rolling trophy and certificates was awarded to team from TSSM's Bivarabai Sawant College of Engineering and Research, Narhe Pune and their project was "Semi Dry Cell Mileage Booster". The team members were Mr. Amit V. Palsule, Mr. Rohan H. Hajare and Mr. Amey S. Deshmukh.



- 3rd prize Rs.5,000/- along with a Rolling trophy and certificates was awarded to two teams of Modern Education Society's College of Engineering, Pune. Their first project was "Optimization of Passive Vehicle Suspension Using MATLAB" Team members of this project were Mr.
Waseem Kurne, Mr. Parag Shirke, Mr.
Gourav Desai and Mr. Saaish Patwardhan. The second project was "Optimization of Automotive Suspension using DOE" Team members of this project were Ms.
Tanushri Soni and Mr. Shaizam Khan.



SAEINDIA Western Section Annual Social

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SAEINDIA Western Section "Annual Social Gathering" for all SAEINDIA Members and SAEINDIA Collegiate Clubs was organized by SAEINDIA Western Section in association with Vishwa karma Institute of Technology Collegiate Club on 31 July 2015 at ARAI (Automotive Research Association of India), Kothrud, Pune.



Dr. Richard Greaves, President SAE International and Mr. Rashmi Urdhwareshe, Chairperson, SAEINDIA WS, felicitated the winner of Project Competition and the winner of Supra 2015 & BAJA 2015 from the western region. Around 200 members from industry and academia attended the program.



Vishwakarma Institute of Technology (VIT) student and faculty members had arranged 6 Performance which included Sand Art, Magnet Art, Upside-down painting, wax painting, Ibru Art 2, Odissi dance, and 2 songs. The Wax painting made by the student of (VIT) has been donated by him to New SAEINDIA Western Section Office, Refreshments and dinner were arranged at ARAI.



SAEINDIA Collegiate Club Inauguration

SAEINDIA Collegiate Club inauguration was held at Department of Mechanical Engineering, Kalsekar Technical Campus, New Panvel, Mr. M. K. Chaudhari represented SAEINDIA Western Section. The first session began at with the recitation of verses from Holy Quran by Third Year Mechanical Engineering Student, Mr. Moiz, Prof Zia Momin, Faculty Advisor introduced the Mr. M. K. Chaudhari. Prof. Zakir Ansari, Head of Mechanical Engineering Department, felicitated Mr. Chaudhari and invited them to inaugurate the club by unveiling the Banner.



Mr. M. K. Chaudhari presented SAEINDIA Activities and its benefits to Collegiate Clubs. He discussed benefits the students can avail from membership and then answered the queries raised by students. Before the end of first session he gave the students exercise to collect important data pertaining to automobile industry in the world and in India and present the same before second session begins. The session ended at 1:45 with Prof. Zakir Ansari's speech.

The second session began with the presentation of data by the students. Mr. M. K. Chaudhari then explained the possibility of growth of automobile industry in coming years followed by **informative presentation on Alternate Fuels**. Prof. Zakir Ansari, felicitated the guest with a memento as a token of honour and appreciation. Prof. Zakir Ansari proposed a vote of thanks.

Eminent Speaker Series Lecture

The Engineering Society For Advancing Mobility Land Sea Air and Space

The Eminent Speaker Series Lecture on **"100 Years of Indian Automotive Industry "**was organized on 21stAug, 2015 at ARAI, Pune, which witnessed participation from engineers and scholars in the discipline of engineering. The speaker for the lecture was **Mr**. **Vinay Mundada**. He is a freelance automobile consultant to various organizations

Dr. K.C.Vora, Vice President, SAEINDIA, welcomed all the participants and introduced Mr. Vinay Mundada.

Mr. Prakash V Sardesai, Vice Chairman Meetings and Conferences SAEINDIA Western Section and Head Engineering and business Development SUD CHEMIE, welcomed Mr. Mundada with a book written by Late. Dr. A. P. J. Abdul Kalam.

Mr. Vinay Mundada has been associated with Automotive Research and Product Development activity for over 45 years. He is basically an engineering graduate from Marathwada University, Aurangabad, and completed his Master's in Mechanical Engineering from University of Liverpool, U.K. in Administration qualification and is a practicing Cost and Works Accountant (CMA). Besides his SAE membership which dates back to 1977, he is also a Member of I MechE(UK) since 1973.

He has contributed a lot to indigenous development of vehicles in India and is a staunch advocate of Design/Develop in India and Make in India philosophy. He has many Indian Industry Firsts to his credit in the field of development of Three wheelers, Light Commercial Vehicles, Utility vehicles, Farm Tractors and Diesel Engines.

He also headed a Technology center for three years in Indonesia and developed heavy trucks and buses. He was recognized as **"Automobile Engineer of the Year 1993"** for his contribution to Auto Industry by IAE India, now SAEINDIA.

The vehicle is already launched in production and well received by the customers. He is quite enthusiastic in guiding the young engineers, which is evident from his participation at BAJA SAEINDIA since inception.

Mr. M. K. Choudhari felicitated Mr.Vinay Mundada with a Memento as a token of appreciation. Mr. Narahari P. Wagh proposed the vote of thanks.

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