MOBILITY FOR SMART CITIES – CHALLENGES & OPPORTUNITIES

SAEINDIA Automotive Board organised 3rd edition of Blue Ribbon CEO Conclave on 14th October 2016 at Hotel Le-Meridian, Chennai during the visit of Mr. Cuneyt L. Oge along with Mrs. Oge and Mr. Murli Iyer. Mrs. Oge is an expert in Environment Protection with years of experience in Policy planning and formulation guidelines on control of emissions and improving Air quality. A Panel discussion on “Mobility for smart cities - Challenges and Opportunities” was held on this occasion.

Dr. Arunkumar - Chair Automotive Board, SAEINDIA made the curtain raiser presentation explaining different challenges and opportunities concerning mobility solutions for smart cities. He touched upon increasing usage of internet in connected vehicles, digital disruptions and skilling India. He highlighted needs of skill development for future and briefed the S²I² initiative of SAEINDIA Automotive board.

The panel was moderated by Mr. Rajendra Khile – DGM, Technical Regulations, Renault Nissan and featured the following eminent panellists:

I. Mrs. Margo Oge, First Lady of SAE International an environmental regulator who served as Director of the Environmental Protection Agency’s and Director of the Office of Transportation and Air Quality USA.

II. Dr. N. Saravanan – Sr. VP, PD at Ashok Leyland Ltd.

III. Mr. Sirish Batchu – Head - Infotronics Tech. & Advance Electronics, Mahindra & Mahindra.

Mrs. Oge mentioned that smart cities have one common theme that is improving the quality of life. She also shared her experience of Emission legislations development in USA which benefitted Auto Industry and Environment through innovation of Catalytic convertor. She also highlighted the need for reducing usage of private vehicles and increased sharing of vehicles to reduce congestion and emissions.

Dr. Sarvanan highlighted the need for holistic approach with very clear vision. He specifically mentioned that each smart city might need different approach. He mentioned about the shift towards Electric Bus for public mobility and supporting infrastructure to speed up it.

Mr. Sirish Bathcu mentioned that smart cities need to be supported by smart villages. He also mentioned about the involvement of software engineers in view of increasing usage of IT and connected vehicles. As this will be generating huge data, it has to be dealt properly to meet safety regulations & improving air quality.

Mr. Oge, President SAE International suggested SAEINDIA to explore possibility of partnering with smart cities while framing mobility solutions. Mr. Khile spoke about involvement of SAEINDIA with 1 or 2 smart cities and provide expert suggestions. He highlighted concerns over cyber security in such high level of connectivity in future.

Mr. D Seshadri, ED, SAEINDIA thanked the participants.
SAEINDIA

SAEINDIA Managing Committee Members 2016 - 2018.

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NASSCOM’S "THE DESIGN AND ENGINEERING SUMMIT"

The Design and Engineering Summit” which was organized by NASSCOM on 5th and 6th of October, 2016 was co-branded by SAEINDIA Automotive and Aerospace boards and SAEINDIA.

The deep-dive session at the NAASCOM Engineering summit began with a talk on Connected vehicles by Mr. Sree Gururaj from Mahindra & Mahindra. The focus of the presentation was on how “Connecting Vehicles was both an Art and a Science”. The presentation began with the grand opportunity i.e. India. With the exploding smartphone proliferation in India, leading to a billion odd connections, the presentation focused on how India has been quick to take on to the digital age. With examples from both rural and urban India, it clearly summarized that the people of India were ready for the digital age and would like to stay connected at all times. The focus then shifted to how people also wanted to stay connected with their vehicles for various reasons and emphasized that it was clearly possible to leverage the economies of scale in implementing a “Connected Solution”, by thinking inclusively.

Each section was delved into detail with case studies, from the experiences derived out of the, “DIGISENSE” Connected Solution implementation by Mahindra. The last section was on ecosystem partners, their roles, and the opportunities and the challenges they bring along. The presentation concluded with a concluding note, that despite the fact that engineering the individual subsystems was a science, orchestration of the ecosystem for a successful implementation was definitely an art.”

“Connected Vehicles” is the hottest trend today in the Automotive Industry and needs a coherent orchestration of the ecosystem between the Automotive, IT, Telecom & Consumer domains in the context of various mobility applications.

Dr. Roshy John, Practice Head, TCS explained the concept of “Autonomous Vehicles” which is largely based on ‘Mobile Robot’ where we use software algorithms of digital filters (Probability Theory & Advance Mathematics). It also calls for deep knowledge in advance electronics. He also gave insights on how new jobs will be created around this domain. Few examples were shown on how few of these practices helped in developing India’s first driverless car – The Driverless TATA Nano.

He predicted that there would be tremendous development in this domain since the price of electronic components and sensors are coming down drastically. Almost all the car manufacturers are going to adapt Advanced Driver Assistance Systems (ADAS) and limited self-driving as a feature within the next five years.

Apart from these there was a special panel session on “Digital Transformation in Aerospace industry – Experiences, Challenges & Opportunities”. Panelists from GE, Honeywell & SAFRAN gave an excellent overview of the industry perspective on the topic and it was well received by the audience. The event was well attended by senior and practicing Aerospace professionals from the industry like Airbus, Boeing, Honeywell, SAFRAN, HCL, Infosys, TCS etc. It was moderated by Mr. Munirathnam J, Chairman of SAEINDIA BS.
Autocar Professional hosted the country’s first-ever two-wheeler industry conclave on 16th November 2016 at New Delhi in association with SAEINDIA. It witnessed over 175 representatives of two-wheeler OEMs, component suppliers and other industry stakeholders. The theme of the conclave was “Preparing for a New Era” of Mobility covered in three key sessions.

The day’s proceedings kicked off with a video message from TVS Motor Company’s CMD Mr. Venu Srinivasan, who said “With the worsening pollution in Indian cities, we have to cut emissions significantly as well”. We have to comply with higher standards of emissions and can be achieved either by improving both combustion & efficiency or by light hybridization.

Session 1: New Era of Regulations and Technologies:

The first panel discussion was moderated by Autocar Professional’s associate editor Mr. Sumantra B Barooah and the industry stalwarts like Mr. Vinay Harne, president, NPD, TVS Motor; Dr. Ravi Damodaran, president – strategy & technology, Varroc Group; Dr. Martin P flueger, director – sales (India), AVL and Mr. Sridhar V Pissay, VP, sales and marketing, Carl Zeiss were also present in the session. The session saw the panellists unanimously identify the upcoming BS VI norms as both the biggest challenge and an opportunity for the Indian two-wheeler industry.

Session 2: A New Era of Mobility – Building the EV Industry in India:

The 2nd session was moderated by Roland Berger’s Dr. Wilfried Aulbur, began with electric vehicles and how they can make a difference. We are about 90% shortfall of govt. targets with current growth rate said Mr. Sohinder Gill CEO, Hero Electric and Director - corporate affairs of Society of Electric Vehicle Manufacturers (SMEV).

Session 3: A New Era in the Marketplace:

The speakers of this final session were Mr. Pankaj Dubey, managing director, Polaris India; Mr. Vimal Sumbly, managing director, Triumph Motorcycles India; Mr. Roy Kurian, vice president– marketing & sales, Yamaha Motor India Sales; Mr. Malo Le Masson, head – global product planning, Hero MotoCorp and Mr. Nikunj Sanghi, director – international affairs and global relations, Federation of Automobile Dealers Association (FADA) moderated by Autocar Professional’s assistant editor Mr. Amit Panday.

All in all, the conclave proved to be a day of exciting two-wheeler industry specific content. It is amply clear that industry executives are actively engaged in chalking out new strategies across the manufacturing, technology and marketing verticals to address the two-wheeled industry of tomorrow.
Mr. Amit Jain, Conference Chairman & Country Head, Electronics Group, India, Visteon, said Automotive Electronics has already matured to a large extent, and OEMs are still contemplating whether they should introduce more electronics into cars, because of the higher expenses involved. Growth is now happening in the infotainment systems, which used to come only in high-end cars. Now, the entry level cars are coming with this system as there is ready acceptance in the market. Safety-related devices will absorb in the coming years mainly driven by regulations.

Mr. Ashok Chandak, Senior Director - Global Sales & Marketing, South Asia Pacific Automotive and India Sales, NXP Semiconductors, in his special address, said 90 per cent of the Auto Innovation is done through electronics, software, semiconductor, Sense - Think - Act, data analysis are the key drivers in automotive electronics.

Dr. Arvind S. Bharadwaj, Senior Vice President - Advanced Technology & Services, Automotive & Farm Equipment Sectors, Mahindra & Mahindra Ltd., in his special address said there were few megatrends that were driving significant changes in the automotive industry including connected vehicles, autonomous vehicles and shared mobility.

Mr. Claude d’Gama Rose, Country Head - India, Continental Group & Managing Director, Continental Automotive Components (India), in his special address, said electronics design is growing globally and digitization of components, dramatic advancement on softwares and designs by Google, Apple, Tesla is growing on a wider scale. The conference witnessed presentations by experts on various interesting topics related to Automotive Electronics.
Core categories in which awards were given out included engines, transmissions, safety, convenience, environment, and technology innovation. Entries were screened by Vehicle Certification Agency (VCA) and external jury members like Mr. Shrikant R. Marathe, Ex-Director, ARAI and Past President SAEINDIA; Dr. RK Malhotra President, SAEINDIA and Director General, Petroleum Federation of India; Dr. Arun Jaura, European Advisory Council, SAE International; Mr. I V Rao, VP & Chair Engineering Education Board, SAEINDIA; Dr. Tapan Sahoo, SAEINDIA Automotive & Development Board; Mr. Sajid Mubashir, Scientist G, DHI-DST Technology Platform for Electric Mobility, Government of India and Mr. Indeep Madan, Managing Director, VCA India.

As part of our vehicle evaluation process for the IATIA, we also extensively drove and rode the cars and motorcycles that were nominated in various categories. This year, to help the editorial team with this evaluation process, we also had on board Mr. Avik Chattopadhyay, an automotive industry veteran who has worked with major OEMs for more than two decades, and Mr. Rajiv Mitra, veteran automotive journalist who has worked with leading publications and TV channels for more than twenty years. With our combined experience of driving, testing and evaluating all kinds of vehicles, we aimed to provide testing scores that reflect each vehicle’s technical prowess and real-world capabilities.

Attended by automotive industry leaders, the IATIA was once again a big success this year and garnered appreciation from OEMs and suppliers alike. “It’s heartening to see the support we’ve received for the IATIA thus far, and the assurance of continued support in the future gives me a lot of confidence. What has come for special appreciation is our endeavour to recognize young engineering talent keen to pursue a career in the automotive industry. I believe IATIA is the right platform for the industry and academia to come together and push the innovation envelope in the student community,” said Deepangshu Dev Sarmah, Editor-in-Chief, Auto Tech Review, summing up the proceedings of the IATIA 2016.

The IATIA 2016 was co-sponsored by Ansys, Varroc and Ace Micromatic, while supporting partners included SAEINDIA and IN-RDVS. Digital broadcast partnership was provided by 24 Frames Digital.
**KRT & SAE TREK:**

We are glad to inform you that SAEINDIA Southern Section conducted KRT & SAE TREK at Muthoot Institute of Technology & Science (MITS) at Ernakulam on 1st & 2nd October 2016. Student Members & Members of SAEINDIA Southern Section of various Institutions participated in the event and made the program a grand success.

The SAEISS Trek was inaugurated with the welcome address from Host College. They gave a warm welcome to all the dignitaries & the participants for the Trek Program. Dr. E. Rajasekar, Secretary SAEISS, Mr. S. Shanmugam, MD, DDIP, Mr. R. Armstrong, MC member SAEISS and Mr. D. Balaji, KRT Champion Lighted the Kuthuvilaku.

Dr. E. Rajasekar, and Mr. S. Shanmugam addressed the participants and gave brief Introduction about SAE Trek and shared their experiences. Mr. D. Balaji, KRT Champion, Dr. S. Senthil kumar, TOPTECH Champion, Mr. T. Ponraj, KPIT, Mr. Ramesh Krishnan, Daimler conducted the Engineering Design Process for SAE trek participants. All the participants enjoyed and learned the engineering concepts by building a jet toy.

On Day 2 all participants along with volunteers went for trekking to Boothathankattu Hills. The participants were breezed by the air and each and every participant experienced the beauty of nature. Dr. E. Rajasekar, Secretary SAEISS, Mr. S. Shanmugam, Managing Director DDIP, Mr. R. Armstrong, MC Member & Mr. T. Kasiraja, MC Member issued the certificate to all the participants. SAEISS appreciated MITS for hosting the prestigious Trek program in their college Premises and presented the memento to the college.

**LECTURE MEETING - RECENT TRENDS IN AUTOMOTIVE AIR CONDITIONING SYSTEM:**

On 6th October 2016 Mahindra World City Division organised a lecture meeting on “Recent trends in Automotive Air Conditioning System” at DOWN TOWN opposite to MAHINDRA WORLD CITY CLUB, Chengalpattu.

Mr. C. Pradeep - Chairman, SAEISS MWC Division, welcomed and introduced the speaker Mr. Rangarajan Srinivasan with his profile. Mr. Upendra, General Manager R&D, RNTBCI has given opening speech about this lecture meeting.

Mr. Rangarajan Srinivasan started his lecture on “Recent trends in Automotive Air Conditioning System”. He wowed the participants with his exemplary talks about the topic. He made the lecture a grand success by visualizing stunning images on the Air Conditioning System to garner the participant’s attention.

Mr. R. Balasubramanian, Secretary, SAEISS MWC, thanked the speaker for his lecture and invited Mr. N. Balasubramanian VP, RNTBCI to felicitate him with the memento for his lecture. He also appreciated the good amount of participation of 61 people from the academic front as well as from the Industry front. Mr. Baskara Sethupathi, Treasurer SAEISS, MWC division gave vote of thanks to all the participants from Industry & academic and also he thanked the speaker Mr. Rangarajan Srinivasan for giving such a wonderful lecture on Automotive Air Conditioning System.
LAUNCH OF TRACTOR DESIGN COMPETITION:
SAEINDIA Southern Section launched a new initiative of Tractor Design Competition for the members of SAEINDIA Southern Section during the visit Mr. Cuneyt L. Oge, SAE International President. Mr. Murli Iyer, SAE International, Mr. Cuneyt L. Oge, Mr. S. Sriraman, Chairman, SAEISS, Dr. U. Chandrasekar, Vice Chancellor, VTU and Dr. E. Rajasekar, Secretary, SAEISS took the stage.

Mr. R. Alaguvel Armstrong, MC Member SAEISS formerly welcomed all the dignitaries, faculties and participants for the launch function of Tractor Design Competition.

He explained about the need of tractor Design competition to the participants and also welcomed dignitaries to formerly inaugurate the Tractor Design Competition by lighting the kuthuvilakku. All the dignitaries in the dais lightened the kuthuvilakku and formerly inaugurated the program.

Dr. V. Chandrasekar, Vice Chancellor, explained about the institution and their activities with SAEINDIA. Dr. E. Rajasekar, Secretary SAEISS also thanked Veltech University, Avadi for hosting the Launch of Tractor Design Competition.

He also welcomed Mr. Cuneyt L. Oge and Mr. S. Sriraman to present the memento to the hosting institution. Dr. E. Rajasekar delivered a vote of thanks and thanked all the participants for making the event a grand success.

FACULTY ADVISER FORUM:
SAEINDIA Southern Section conducted FACULTY ADVISOR FORUM on 13th & 14th October 2016 at Veltech University, Chennai. Mr. S. Sriraman, Chairman SAEISS, Dr. E. Rajasekar, Secretary SAEISS, Mr. S. Shanmugam, MD DDIPL and Guest of Honour Dr. S. Mannan, Scientist (Retd.), IGCAR & Advisor, VTU honoured the program with their presence. Totally 23 faculty advisors from various collegiate clubs of SAEINDIA Southern Section attended the program as participants.

The program was started with a Welcomed address by Mr. C. Siva kumar, Faculty Adviser Forum Champion SAEISS. He welcomed Guest of honour Dr. S. Mannan, and other dignitaries as well faculty participants for the program. Mr. S. Shanmugam explained about the need of Faculty Advisor Forum program to the participants.

Mr. S. Sriraman, explained about the activities of SAEINDIA Southern Section to the participants of Faculty Advisor Forum. Guest of honour Dr. S. Mannan, gave a lecture on How to write a research proposal. He started the session with the participants introduction and then how to write research proposals. He also explained about the Background and Significance, Literature Review, Research Design and Methods. Preliminary Suppositions and Implications.

On 14th October 2016 all the participants were taken to CVRDE, Avadi and Wheels India, Padi.

During the valedictory function Mr. C. Siva Kumar thanked all the participants for attending such a wonderful program. He distributed the certificates to the participants.
SAEINDIA Southern Section conducted the lecture meeting on “Stretch the Horizon Auto Mobility & Aero Mobility 2050” by Mr. Cuneyt L. Oge, President SAE International on 13th October 2016 at Hotel Radisson Blu, Egmore.

Mrs. Thangamalar welcomed Mr. & Mrs. Cuneyt L. Oge, Mr. Murli Iyer from SAE International, members from SAEINDIA and SAEISS and participants for the lecture. She introduced the speaker to the participants and also welcomed the speaker for delivering the lecture.

Mr. Cuneyt L. Oge started his lecture on the topic. He started his lecture with the basics of the emission norms and the need for the emission control for a better life in the future. He also explained about the impact on the climate if emissions are not controlled.

He also explained the current emission norms we are following EURO IV with the advancement in the technology and also concerns about the environment. He explained the exhaust norms to be followed and need to be achieved to reach the EURO VI.

He explained the need of adopting to EURO VI to reduce the pollution and to increase the fuel economy. Mr. Cuneyt L. Oge welcomed questions from the participants and he answered all the questions raised by the participants with facts and figures.

Mr. S. Krishnan, MC Member SAEISS thanked the Mr. Cuneyt L. Oge for his knowledge enriched lecture on the topic. Dr. E. Rajasekar welcomed the Dr. Aravind S. Bharadwaj, Past President of SAEINDIA and Mr. S. Sriraman, Chairman SAEISS to present memento to Mr. Cuneyt L. Oge. He also delivered a vote of thanks.

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SAEINDIA Southern Section inaugurated the New KRT Club at Veltech University, Avadi on 13th October 2016. Mr. S. Senthilkumar, Professor Veltech University presented the new initiatives and activities of SAEINDIA planned and conducted at Veltech. He also formally announced the inauguration of New KRT Club at Veltech University.

Dr. E. Rajasekar, Secretary SAEISS thanked Veltech University, Avadi for the new initiative and welcomed Mr. Cuneyt L. Oge and Mr. S. Sriraman to issue the KRT Club certificate to the hosting institution. Both handed over the certificate to Dr. U. Chandrasekar, Vice Chancellor. Vote of thanks was delivered by the faculty of Veltech University.

SAEINDIA AERO DESIGN CHALLENGE 2017:

SAEINDIA Southern Section and Aerospace Development Council launched the SAEINDIA Aero Design Challenge 2017 at MIT Campus, Anna University, Chennai on 14th October 2016. The Kuthuvilakku was lighted by Mr. Cuneyt L.Oge, SAE International President, Mr. S. Sriraman, Chairman SAEISS, Dr. A. Rajadurai, Dean MIT campus.
SAEINDIA Southern Section conducted AWIM KICK OFF 2016 hosted by B. S. Abdur Rahman University, Vandalur on 14th October 2016. Various school teachers & students participated in the event and made the program a grand success.

Dr. R. Rajendran, MC member, SAEISS, welcomed the Chief guests Mr. Cuneyt L. Oge International president, Mr. Murli Iyer Global development manager SAEINDIA, other delegates of SAEISS and the participants. Dr. D. Muruganandam, MC member, SAEISS, briefly explained about the AWIM and how students are benefited by participating in this activity.

Dr. V. M. Periasamy, Vice chancellor of B. S. Abdur Rahman University presented the Gift to Mr. Cuneyt L. Oge International president, Mr. S. Sriraman, Chairman, SAEISS and Mr. Murli Iyer, Global Development Manager, SAEINDIA. Mr. S. Sriraman, thanked B. S. Abdur Rahman University for hosting the AWIM Kick off 2016 program in their organization and presented a memento to Dr. V. M. Periasamy.

Mr. Cuneyt L. Oge, gave inspiring speech about the society and its working. He also mentioned the advantages for the students if they become the members of this society. Added to this, he also spoke about the future of the automobile engineering.

After this there was an interesting question and answer section, during which many students asked their doubts to Mr. Cuneyt L. Oge International President and for which he gave answers with his deep insight knowledge and personal experience. Mr. Cuneyt L. Oge International President presented the memento to Mr. Pramod kumar, Global straws. He is the supplier of axle and bearing used in the AWIM kit.

Dr. D. Muruganandam, Mr. C. Shanmugam, Trainer AWIM and Mr. D. Raguraman, Kick off champion conducted the Engineering Design Process for AWIM participants. Every participant enjoyed and learned the engineering concepts by building a jet toy. The built jet toy was tested for its performance, accuracy and speed. It can travel with different nozzles and different weight loads.

Principal of Crescent School presented a gift to all the Participants of AWIM Kick off 2016.
LAUNCH OF aSOP (AUTOMOTIVE STUDENT ORIENTATION PROGRAMME):

SAEINDIA Southern Section launched a new initiative of Automotive Student Orientation Program (aSOP) for the student members of SAEINDIA Southern Section during on 14th October 2016 at B. S. Abdur Rahman University, Chennai. Mr. Cuneyt L. Oge, President SAE International, Mr. Murli Iyer, SAE International, Mr. S. Sriraman, Chairman SAEISS, Dr. V.M. Periyasamy, Vice Chancellor, B.S. Abdur Rahman University took the stage.

Mr. S. Shanmugam, Mentor, SAEISS formally welcomed all the dignitaries, faculties and participants. He explained about the need of aSOP for students and the benefits of program. He also welcomed all the dignitaries in the dais to light the kuthuvilakku. Mr. R. Alaguvel Armstrong, MC Member SAEISS thanked all the members, participants and the hosting college. He requested Mr. Cuneyt L. Oge, and Mr. S. Sriraman, to present the memento to them.

LAUNCH OF KRT COMPETITION:

SAEINDIA Southern Section launched a new initiative of Knowledge Round Table Competition for the regular members of SAEINDIA Southern Section on 14th October 2016 at B. S. Abdur Rahman University. Mr. C. Pradeep, Chairman MWC Division welcomed the chief guests Mr. Cuneyt L. Oge, SAE International President, Mr. Murli Iyer, Global Development Manager SAE International, Mr. S. Sriraman, Chairman, SAEISS, Dr. V.M. Pariyasamy, Vice Chancellor, B.S. Abdur Rahman University took the stage.

Mr. B. Srinivasan, MC Member SAEISS welcomed all the dignitaries, faculties and participants for the launch KRT Competition. He explained the plan of SAEISS and also he explained the competition for the regular member to keep them sharp in this world.

He also thanked the hosting college for hosting the event. He requested Mr. Cuneyt L. Oge, and Mr. S. Sriraman to present the memento for hosting college for this event.

LAUNCH OF YOUNG ENGINEERS MEET:

SAEINDIA Southern Section organized the Young Engineers Meet on 14th & 15th October 2016 at B.S. Abdur Rahman University. Mr. C. Pradeep, Chairman MWC Division welcomed the chief guests Mr. Cuneyt L. Oge, SAE International President, Mr. Murli Iyer, Global Development Manager SAE International and Mr. S. Sriraman, Chairman SAEISS to take the dais. He also welcomed all the other dignitaries and delegates to the Young Engineers Meet the first program of its kind.
TOPTECH – QUALITY FUNCTIONAL DEPLOYMENT:

SAEINDIA Southern Section organised a Toptech program on 13th & 14th October 2016 titled “Quality Function Deployment” at Hotel Lemon tree, Chennai.

Mr. S. Shanmugam, Mentor of SAEISS welcomed all the participants and the speaker Mr. S. Selvamani on behalf of SAEINDIA Southern Section.

Mr. S. Sriraman, Chairman SAEISS thanked the host Institution B.S. Abdur Rahman University for their continuous support as well their initiative to host such events and presented memento to Dr. V.M. Periyasamy, VC, B.S. Abdur Rahman University.

Mr. Narendra Kumar, Paradigm Learning Solutions conducted the Team building activities. The participants interacted with the expert and lectures were given on self-confidence & development of skills. He also explained the common mistakes done and the barriers of achieving great things.

Mr. S. Kumaresan and Mr. Sivakumar from M&M conducted the Auto Quiz which was interesting and created interest among the participants in answering the quiz. Dr. E. Rajasekar, Secretary SAEISS gave a lecture on Automotive Safety. In his lecture he explained all the advances in automotive sector with the emerging Autonomus Driving and he detailed all the advanced sensors used in the vehicle.

Mrs. Lalitha Giridhar, Toast Master handled the Communication Strategies session. She made the participants more attentive by exposing them into thought provoking world with short stories and with few videos. She pointed out the necessity to be aware of the happenings around us and also to be humble with everyone.

Mr. M.P. Prasad, Champion – Team Building gave a lecture explaining from the start of designing a Car and the various stages until the product is completed. He also explained the strategies and pains taken during the manufacturing process.

Dr. E. Rajasekar and Mr. C. Pradeep felicitated the Program and presented mementos to Mr. S. Kumaresan, Mr. Sivakumar, Mrs. Lalitha Giridhar, and Mr. M. P. Prasad for their lecture and contribution for Young Engineers Meet Program.

He also distributed the certificates to all the participants for participating in the Young Engineers Meet and asked for their continued support for such future programs.
LECTURE MEETING – ENGINE DESIGN AND DEVELOPMENT IS CHALLENGE OR CONSTRAINT:

SAEINDIA Southern Section Chennai Division organized Lecture Meeting program on “Engine design and development is challenge or constraint or opportunity for professionals” on 05th November 2016 at MMA, Chennai.

Mr. K. Ganapathy Subramanian, GM – Marketing, Simpsons welcomed all the participants. Mr. M. Khader Basha, Chairman, SAEISS-Chennai Division welcomed and introduced the speaker Mr. S. Krishnan.

Mr. S. Krishnan started his lecture by explaining the topic of the day Engine design and development is challenge or constraint or opportunity for professionals. Engine design and development is a challenge since each and every part of the engine contributes to the working of the engine and its performance. So it’s a challenge for professionals. We have various constraints such as exhaust, performance and power output, so designing and development of engine has constraints too. The knowledge and skill of the professionals can be used to design and develop an engine which is a great opportunity to showcase their knowledge.

Each and every part of the engine was explained by the speaker with the advancements in the corresponding parts. The emissions norms were also explained. He explained about how to design the diesel engine components and changes to be needed in valve diagram to reduce the emission to meet the future emission norms in the automotive industry.

The speaker shared his experience working with Kawasaki motors in which he designed and developed an engine which made history with a mileage of 87kmpl.

Mr. R. Senthil kumar delivered a vote of thanks and Dr. S. Sundaresh, Former Director General R&D, DRDO, presented him the memento as the token of gratitude.

KRT CLUB INAUGURATION:

SAEINDIA Southern Section inaugurated the New KRT Club at TAFE, Madurai on 5th November 2016.

Dr. R. Rajendran, Management Committee Member SAEISS, Mr. V. Srinivasan, SAEISS Madurai Division Chairman, Dr. R. Kannan, SAEISS Madurai Division Secretary and Dr. M. Udayakumar, SAEISS Madurai Division Treasurer took the stage. Dr. R. Kannan gave the welcome address to all the participants and dignitaries. Mr. V. Srinivasan addressed the gathering.

Dr. R. Rajendran thanked management of TAFE, Madurai for taking this initiative and inaugurating the KRT Club in their Company. He issued the KRT Club certificate to Mr. V. Srinivasan, TAFE, Madurai.

Dr. R. Rajendran explained about the KRT initiative to the participants present and explained how it is helpful in a company to encourage their own staff to share their knowledge. He also gave his lecture on “Surface Engineering”.

Dr. M. Udayakumar thanked all the participants and Dr. R. Rajendran. Mr. V. Srinivasan presented memento to Dr. R. Rajendran.

LECTURE MEETING - INDUSTRY 4.0:

SAEINDIA Southern Section organized a Lecture Meeting program “Industry 4.0 – Trends and Implication for Indian automotive industry” on 19th November 2016 at SAEINDIA Southern Section Office, Guindy.

Mr. S. Sriraman, Chairman of SAEISS welcomed all participants and introduced the speaker Mr. Aiyappan Ramamurthi, about his vast experience and handed over the session to him.
Mr. Aiyappan Ramamurthi started the session about PLM Software basics and shared the knowledge about 3D product life cycle management. He explained about digital twin and digital thread in software to store the data about organization, employee details, and project details and supply chain management.

He explained about product lifecycle management (PLM) is an information management system that can integrate data, processes, business systems and, ultimately, people in an extended enterprise. PLM software allows you to manage this information throughout lifecycle of a product efficiently and cost-effectively, from ideation, design and manufacture, through service and disposal.

Mr. Aiyappan Ramamurthi explained PLM software used in various industries such as Aerospace and Defence industry, Automotive and transport industry and products and retail solution etc.

At end of the session Dr. E. Rajasekar, Secretary of SAEISS thanked all the participants and speaker for the wonderful session and appreciated his energetic presentation. Mr. Sriraman, Chairman, SAEISS and Mr. G. Nagarajan, Director of Admission, Anna University, presented the memento to Mr. Aiyappan Ramamurthi.

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**AWIM - MASTER TEACHERS TRAINING PROGRAM:**

AWIM (A World In Motion) Master Teachers Training Program was conducted successfully on 18th & 19th November 2016 at Vidhya Metric Hr. Sec. School, Medavakkam. The training was focused on jet toy activities of AWIM curriculum. There were overall participation of 25 on each day.

On 18th November 2016, Mr. T. Kasiraja, MC member SAEISS welcomed all participants. It was followed by introduction of all individuals. The training started with the introduction of SAEINDIA Southern Section, explaining the different activities conducted by the society for the different categories of members.

On 18th November 2016, Mr. T. Kasiraja, MC member SAEISS, Dr. D. Muruganandam, MC Member for AWIM, Mr. D. Raguraman, Event champion and Mr. B. Senthil Kumar, SKIP Champion SAEISS thanked Vidhya Metric Hr. Sec. School for hosting the Master Teacher Training Program in their organization and presented a memento to Mr. P. Anand, Principal.

On 1st day Dr. D. Muruganandam, MC Member, AWIM & Mr. D. Raguraman, Event champion presented the Jet toy activities and they demonstrated the building of chassis and Jet toy. After initial demonstration, there were seven teams for the event.

The teams were asked to test their chassis on a ramp with specified gradient to check the directional stability of the Jet toy and were asked to install the balloon later on, to complete the jet toy. The teams were provided with charts to prepare the presentations with theme for their Jet toy. They were also rated on aesthetic round.

Each team tested their jet toy on the corresponding tracks for Distance, Weight, Speed, Extended time travel & Accuracy. The results for the same were noted by the corresponding teams.

On 2nd day Mr. C. Shanmugam, AWIM trainer briefly explained how to solve the problems in the jet toy vehicle to participants and shared his experience and gave some expert tips for training their students.

Mr. C. Pradeep, Chairman, SAEISS, Mahindra World City Division came for the valediction on 19th November 2016. He reviewed each teams Jet toys on the tracks and also their presentations. He also gave some improvement tips for each team.

Mr. C. Pradeep, Mr. C. Shanmugam, Dr. D. Muruganandam, Mr. P. Anand, Principal at Vidhya Metric Hr. Sec. School, Mr. D. Raguraman, Event champion and Mr. B. Senthil Kumar, SKIP Champion SAEISS distributed the certificates and gifts to all Master Teacher Training Program participants.
SAEINDIA Section News - Bangalore Section

COLLEGIATE CLUB - INAUGURATION:

On 5th October 2016 Collegiate club of Dayanand Sagar College Of Engineering was inaugurated by Vice chairman of the section Mr.K.P.Murthy and the Section’s secretary, Mr.Kannan.M. Inauguration was followed by a technical talk delivered by Mr.Ravi Goka from TVS Motors.

COLLEGIATE CLUB - INAUGURATION:

On 25th October 2016 Collegiate club of Srinivasa Institute Of Technology, Mangaluru was inaugurated by Vice chairman of the SAEIBS Mr.K.P.Murthy and and Mr.Purushotham.S.Joshi, BDM, SAEIBS followed by a technical talk delivered by Mr.Murthy.

COLLEGIATE CLUB - INAUGURATION:

On 8th October 2016 Collegiate club of Vivekananda college of Engineering and Technology, Puttur, Mangaluru was inaugurated by Vice chairman of the Bengaluru section Mr.K.P.Murthy and and Mr.Purushotham.S.Joshi, BDM, Bengaluru section. Inauguration was followed by a technical talk delivered by Mr.Murthy.

MANOVEGAM – AWARENESS PROGRAM:

On 26th October 2016 An awareness program for the Mangaluru region colleges regarding ‘Manovegam’ – Aero competition being conducted by the Section was held at Srinivasa Institute Of Technology. And the session was handled by Mr.Purushotham.S.Joshi, BDM, Bengaluru section. The program received a good response from the students and some of them had shown their interests during the event. All the queries regarding the event were addressed by Mr.Purushotham.S.Joshi, BDM, Bengaluru section.
AWIM Regional Olympics was held on 3rd December 2016 at the TVS Institute for quality and leadership, Bengaluru under the guidance of Dr. Manish Jaiswal, MC member, SAEIBS, as the convener of the event, and 72 students from 6 schools participated. The winners were:
- Jet Toy winner: Titan School
- Jet Toy Runner up: Ashraya Neelbagh School
- Skimmer: Ashraya Neelbagh School.

Mr. Munirathnam, Chairman, BS, Mr. Kannan, Secretary, BS, Mr. Anoop B. Srinivasan, Chief Trainer of AWIM, Mr. Girish Ramaswamy, MC member, BS were present on the occasion to encourage the children. Industry leaders, Mr. Sarbajit Ghose and Mr. Rabindra Srikantan attended as judges and appreciated the event.

Membership drive was held at Delphi on 16/12/2016 and 22/12/2016, where, nearly 90 members have come forward to enroll themselves for SAEINDIA membership.

SAEINDIA SJEC Collegiate Club organized an “AEROSPACE AWARENESS PROGRAMME” in association with Society of Automotive Engineering INDIA and Aerospace Board of Bangalore Section on 24th November 2016 for students of nearby engineering colleges of Mangaluru region keeping in view of Career opportunity and challenges in the Aerospace industry.

Program was inaugurated by Mr. Munirathnam, Chairman SAEINDIA Bangalore Section and briefed about objectives and activities of SAEINDIA. Mr. Damodaran Subramanian, Senior Vice President, SAFRAN Engineering Services delivered key note address on Opportunities and Challenges in Aerospace Industry. Mr. Dinesh Manoharan, Senior Manager, UCAL-JAP Systems LTD, Chennai educated the students about construction and design of Unmanned Aerial Vehicle (UAV) and explained the guidelines of “Manoveagam”, a competition where students will design, build and fly an aircraft.

More than 150 students participated in the programme. Rev. Fr. Rohith D’Costa, Assistant Director, presided over the function. Dr. Rio D’Souza, Vice Principal was the Guest of Honour, Dr. Sudheer M HOD – Mechanical Engineering, Mr. Vijay V.S. Senior Faculty Advisor, Mr. Yatish Kumar K Additional Faculty Advisor and Mr. Dilish Joy Lobo Student Chairman conducted the proceedings.
AWIM MASTER TEACHER TRAINING PROGRAM:

AWIM (A World In Motion) Master Teachers & Volunteers Training Program” was conducted successfully 7th Oct 2016 at Gold Crest High School, Vashi, Navi Mumbai. The training was focused on Jet-Toy activity of AWIM curriculum. Training was given by master trainer Mr. Sagar Murugkar to around 18 teachers as participants for this training.

Teams of four members were made which comprised of minimum 1 art teacher in a group. The training started with the introduction of SAE International and SAEINDIA, explaining the different activities conducted by SAE for different categories of members.

After the initial demonstration, the teams prepared Jet toys. Teams were asked to build different types of Jet-Toys other than conventional designs. They were also provided with chart papers to prepare presentation with a theme for their Jet toy.

Each team tested their Jet-toy on corresponding tracks for Distance, Weight carrying capacity, Speed, Accuracy and Maximum time. The results for the each round were noted by respective team during the training program.

Master Trainers presented on Track Description & Scoring along with Rules /Guidelines for the competition. They also presented science notes on simple physics involve in Jet-Toy for school children.

Teachers & Volunteers would train the students in respective schools in coming months. These winning students team from each school would participate in city Olympics.

COLLEGIATE CLUB - INAUGURATION:

On 21st October 2016 Collegiate Club Inauguration program was held at Karmaveer Bhaurao Patil College of Engineering, Satara. The club was inaugurated by Mr. Sagar Murugkar, SAEINDIA Western Section. He presented SAEINDIA activities and its benefits to all the student members. After the presentation Mr. Sagar interacted with student members and faculty members regarding the collegiate club guidelines.

MEMBERSHIP DRIVE & TECHNICAL LECTURE:

On 23rd November 2016 a technical lecture was organised for employees of FIAT India Pvt. Ltd. campus on topic of “India Emission Regulations” by Mr. Ramesh Pasrija. This was followed by presentation on SAEINDIA member benefits as part of membership drive for probable members. Mr. Ramesh Pasrija & Mr. Sagar Murugkar participated. Some members registered for membership.

AWIM REGIONAL OLYMPICS 2016 - SOLAPUR:

SAEINDIA Western Section, in association with Mahindra & Mahindra concluded ‘A World In Motion’ (AWIM) Solapur Olympics at N. K. Orchid School, Solapur on 3rd December 2016. Total of 9 school students 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.
The competition was judged by a panel of eminent personalities from the automotive field. Mr. Manoj Girhe, John Deere graced the Valedictory function as the Chief Guest and gave away the prizes to the winning teams.

Here was a contest with full of fun & challenges for School Students called A World In Motion® (AWIM). The two main program revealed innovative, hands-on, physical science curriculum, designed by the Society of Automotive Engineers (SAE), USA. AWIM was started in the US first and India is the second country to conduct a competition at National level for school children. 9th AWIM National Olympics was scheduled at Hotel Maple Emerald, New Delhi, on 7th January 2017. The winner team from AWIM Pune Olympics for “Jet Toy” and “Skimmer” will be participating in this competition.

Team from Valentine Circle School were the winners in Jet Toy as well as Skimmer category. Team from Ideal English School were the runners-up in Jet toy category.

SAEINDIA Western Section, in association with Automotive Research Association of India, John Deere, Eaton Technologies and Cummins India concluded ‘A World In Motion’ (AWIM) Pune Olympics at SNBP International School, Baner, Pune on 10th December 2016. This competition saw 21 school students 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. The competition was judged by a panel of eminent personalities from the automotive field. Mr. Amit Agarwal, Director-Technical, ANSYS India graced the Valedictory function as the Chief Guest gave away the prizes to the winning teams.

Winning Teams:

<table>
<thead>
<tr>
<th>Category</th>
<th>Name of The School</th>
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<tbody>
<tr>
<td>Overall Winner</td>
<td>S1 Ramchandra Gaikwad Vidyalaya, Dighi</td>
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<tr>
<td></td>
<td>S21 Walnut School, Shivne</td>
</tr>
<tr>
<td>Overall Runners-up</td>
<td>S3 SNBP international School, Rahatani,</td>
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<tr>
<td></td>
<td>S17 Moedina High School, Swarget</td>
</tr>
<tr>
<td>Distance</td>
<td>S11 Panditrao Agashe School</td>
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<tr>
<td></td>
<td>S33 PMC School, Balewadi</td>
</tr>
<tr>
<td>Weight</td>
<td>S8 PMC School, Wadgaon Sheri</td>
</tr>
<tr>
<td></td>
<td>S17 Moedina High School, Swarget</td>
</tr>
<tr>
<td>Accuracy</td>
<td>S10 DAV Public School, Aundh</td>
</tr>
<tr>
<td></td>
<td>S36 DAV Public School, Aundh</td>
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<tr>
<td>Speed</td>
<td>S1 Ramchandra Gaikwad Vidyalaya, Dighi</td>
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<td></td>
<td>S24 Zilla Parishad School, Lonikand</td>
</tr>
<tr>
<td>Turn-ability</td>
<td>S8 PMC School, Wadgaon Sheri</td>
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<td></td>
<td>S21 Walnut School, Shivne</td>
</tr>
<tr>
<td>Presentation</td>
<td>S3 SNBP international School</td>
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<tr>
<td></td>
<td>J13 New English School, Ramanbag</td>
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LECTURE MEETING – A SUCCESS STORY:

Eminent Speaker Series Lecture on “Success Story of Fleetguard filters in reducing time required for engineering designs using Theory Of Constraints” by Mr. Sadashiv S. Pandit, Executive Chairman at Fleetguard Filters Pvt. Ltd. was organised at ARAI on 16th December 2016 and witnessed more than 45 participants.

Mr. Sadashiv Pandit is the Executive Chairman of Fleetguard Filters Pvt. Ltd. He has a degree in Mechanical Engineering along with specialization in HR from XLRI Jamshedpur. He started his career with Kirloskar Cummins, was the Chief Executive at Hodek Engineering and the Managing Director of Fleetguard Filters Pvt Ltd. Mr. Pandit is also Chairman on various Filtrum group companies. He has a rich and varied experience of 30 plus years in Industrial Engineering.

He is the Vice President of Shree Ramakrishna Charities a charitable trust which provides free education to underprivileged children.

His lecture had following points:

- Fleetguard –overview
- What is Theory of Constraint (TOC)
- Key beliefs of TOC
- Core problem of a project management
- TOC solution through Critical Chain Project Management
- Application to Fleetguard
- Measurement of effectiveness
- Key Learnings
- Way Forward

TECH TALK – A PHYSICO-CHEMICAL SIMULATION:

The Tech Talk Series Lecture on “Efficient Physico-Chemical Simulation of Fuels, Combustion and Emissions in IC Engines” was organized on 21st December 2016 at ARAI, Pune. The speaker for the lecture was Brigadier Deepak Bhat, (retd), Regional Business Head, Talent Makers & CEO, CMCL Innovations.

He has also been an Instructor at the Defence Institute of Psychological Research and has trained officers of Army, Navy and Air Force to be assessors at the respective SSBs. As a part of the development assistance he conducts interactive workshop on Emotional Intelligence which highlights the importance of awareness of Inter and Intrapersonal dynamics of emotions.

His lecture included following key points:

- Emotional Intelligence is the term that came into active discussion in the management community in early 80s. Many scientists and psychologists have contributed to bringing clarity to the interplay of emotions and their effect on inter and intrapersonal energy projection at the time of human interaction in any setting.
- Emotional intelligence can be defined as the ability to understand and monitor one’s own and other people’s emotions, to discriminate between different emotions and label them appropriately and to use emotional information to guide thinking and behaviour.
- An interactive workshop will be conducted for budding managers as well as experienced managers to add to their abilities in handling real world situations. their careers.
AWIM MASTER TEACHER TRAINING PROGRAM:

AWIM (A World In Motion) Master Teachers & Volunteers Training Program (MTTP) was conducted successfully 21st Dec 2016 at Adishwar College of Technology, Gandhinagar. The training was focused on Jet-Toy activity of AWIM curriculum. There were around 7 teachers participants from 4 different schools for this training.

The master trainer for Jet-toy was Mr. Rohit Yadav. Teams of four members were made which comprised of minimum 1 art teacher in a group. The training started with the introduction of SAE International and SAEINDIA, explaining the different activities conducted by SAE for different categories of members.

After the initial demonstration, the teams prepared Jet toy. Teams were asked to build different types of Jet-Toys other than conventional designs. They were also provided with chart papers to prepare presentation with a theme for their Jet toy.

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