



## This issue

Northern Section P.1

SAEINDIA National Events P.3

Bangalore Section P.10

Northern Section P.11

Southern Section P.11

Western Section P.14

## SAEINDIA Section News - Southern Section

### SAENIS EFFICYCLE 2016 - Workshop

SAEINDIA Northern Section (SAENIS) in association with Maruti Suzuki (MSIL) and International Centre for Automotive Technology (ICAT) organized one day workshops for the participants of the Efficycle 2016 event at 3 different locations in country.

These one day workshops were organized at Northern India Engineering College (NIEC), New Delhi on 18th June, 2016, for the teams from North & East, at Bangalore Institute of Technology (BIT), Bangalore on 19th June, 2016 for the teams from South and at College of Engineering, Pune on 26th June, 2016 for the teams from West.

Workshops started with the formal inauguration followed by the welcome speech by Shri U.D.Bhangale (Sr. General Manager-ICAT & Convener-Efficycle 2016). Workshops were delivered by the speakers from Technical Committee Mr. Jitendra Singh Gaur & Mr. Harpreet Singh Juneja of ICAT. Out of total 4 sessions of the workshop, during the first two sessions teams were explained in detail about all the rules to design and fabricate the vehicle. This year event is being organized as "BUILD QUALITY SEASON" so during the workshop, emphasis was given to the theme of this season to have good build quality vehicles during main event. The first two sessions concluded with the Q&A from teams followed by the lunch.

Third session focused on the explanation of report formats which teams have to submit at different stages of the event. During fourth and last session, teams were informed about the procedure of main event which is going to be held at Lovely Professional University in October' 2016.

Elaboration of technical assessment at college level, on-site technical inspection, static event (design, cost, build quality evaluation and marketing presentation round) and dynamic event (acceleration, gradient, manoeuvrability, utility and endurance run) helped the teams to understand the evaluation process. During open sessions at the end, teams asked their queries to the speakers. Efficycle alumni members also shared their experience with teams. About 120 teams from all over India attended the workshops in three locations.

Organizing committee members, Mr. Anubhav Singla, Mr. Rajkumar Dwiedi, Mr. Sumit Kumar and Mr. Akhsay Singla from MSIL and Mr. Utkarsh Tyagi, Mr. Udit Kaul from ICAT were also present during the workshops. Alumni Committee members Mr. Prateek Bansal, Mr. Ajinkya Shah, Ms. Charul Chaddha supported organizing committee in successful organizing of workshops.

The workshop ended with National Anthem and the vote of thanks to host institutes.

Upcoming Major  
Events

July 2016  
SUPRA SAEINDIA 2016

## SAEINDIA

### SAEINDIA Managing Committee Members 2014 - 2016.

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**Mr. Shrikant R. Marathe**

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Sr. Vice President & Chair, Finance Board

**Dr. Bala Bharadwaj**

Vice President & Chair, Aerospace Board

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**Mr. Arun Sivasubramaniam**

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**Mr. C V Raman**

Vice Chair, Sections Board

**Mr. M Kannan**

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Programs Board

**Representing SAE International**

**Dr. David. L. Schutt**

**Mr. Murli M. Iyer**

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**Mr. Mohit Sehgal**

Member

## SAEINDIA Section News - Southern Section

### KRT Club Inauguration TAFE & UCAL

Tractors and Farm Equipment limited with team of 50+ SAEINDIA members launched Knowledge Round Table on 2nd April 2016 at TAFE premises with the eminent guidance of SAEINDIA Management committee, SAEISS Chairman Mr. Sriraman, VP-R&D, TAFE and in the presence Mr. Sarangarajan, Sr. VP-Operations, TAFE.



Event was graced by SAEINDIA Southern Section Management Committee Mr. S. Shanmugam, SAEISS Vice Chairman, Director-DDI and Dr. R. Rajendran, SAEISS MC, Professor BSA University, Mr. T. R. Sathyanarayanan, Treasurer SAEISS, DGM-WABCO, Mr. B. Srinivasan, SAEISS MC, GM R&D, UCAL fuel systems. Mrs. Thangamalar Principal Member (R&D) TAFE, KRT Facilitator managed the proceedings of the KRT.



Mr. S. Shanmugam, SAEISS Vice Chairman, Director-DDI gave a lecture on Future Competencies and Dr. R. Rajendran, SAEISS MC, Professor BSA University gave a lecture on Surface Engineering for the KRT members at TAFE.

UCAL Fuel Systems Limited with team of 21 members launched KRT on 10<sup>th</sup> June 2016. Knowledge Round Table was inaugurated in the presence of Mr. P. H. Narayanan, CEO, UCAL Fuel Systems Limited.



Mr. B. Srinivasan, SAEISS MC, GM R&D, UCAL Fuel Systems Limited took initiative to form the KRT Club at UCAL. Dr. R. Rajendran, SAEISS MC, Professor BSA University gave a lecture on Surface Engineering of Automotive Components for the members at UCAL.

### FACTORY VISIT

29 students from various engineering colleges and 3 faculty members visited TAFE Madurai Tractor plant on 13<sup>th</sup> April 2016. Factory Visit was organized by the SAEISS Champion Mr. Hari Prasath, Assistant Professor, SSMIET, Dindigul for the Madurai division student members. Members were thrilled to see the manufacturing process of the world class facility.



## POLICY PLANNING MEETING

SAEINDIA Southern Section conducted the Policy Establishment Meeting on 16th & 17th April 2016 at Ideal Resorts, Mahabalipuram, Chennai under the leadership of Mr.S.Sriraman Chairman SAEISS. Most of the Management committee members of SAEISS participated and contributed in framing the new initiatives of the section.



Mr. S Selvamani, Mentor for policy establishment has delivered his speech on Society, Governance, expectation and imperatives. Dr. E. Rajasekar, Secretary SAEISS has presented the ongoing activities of 2015-16 and proposed activities, roles & responsibilities of the MC members for 2016-17. Mr. T. Kasiraja, Joint Treasurer SAEISS presented the Budget for 2016-17.

Three new teams were formed to further develop the new initiatives identified.

Mr. S. Shanmugam, Vice Chairman SAEISS thanked all the members attended the Policy Planning Meeting of SAEINDIA Southern Section for spending their valuable time.

## SAE TREK

SAE Trek was successfully hosted by K. Ramakrishnan College of Technology, Trichy on 23<sup>rd</sup> and 24<sup>th</sup> April 2016. The college authorities gave a warm welcome to the SAEISS MC Members and SAE Trek Champion, Mr. Paul Linga Prakash.



Trek program was inaugurated on 23<sup>rd</sup> April 2016 with a welcome note by the faculty advisor. Mr. Kasiraja, SAEISS MC and also the resource person for the program was felicitated by the head of the department. Mr. Kasiraja addressed the gathering and started the session by explaining the engineering design concepts to the student members. Resource person also explained the various design fundamentals to the participants. Mr. S. Selvamani, Mentor, Mr. V. Srinivasan, Chairman-SAEISS Madurai Division, and Mr. R. Armstrong, SAEISS MC addressed the participants in the evening. On 24th April 2016, the participants along with volunteers and the SAEISS MC team went for a trek to Mangalam Falls, Pachamalai. 23 student members from four different colleges participated and benefited by this program.

## LECTURE MEETING – DIGITAL MANUFACTURING

Lecture Meeting program on “Digital Manufacturing” was conducted by SAEINDIA Southern Section on 29th April 2016, Friday at Lemon Tree Hotel, Guindy. Mr. Sanjeev Balan, Senior General Manager – Manufacturing Engineering, TAFE was the eminent speaker for this program. Mr. Kumaran Bharatheedasan / Lecture Meeting Champion SAEISS gave speech about ongoing SAEISS activities and future activities to all the participants and invited them to be an active SAEISS Volunteers.

Mr. Kumaran Bharatheedasan introduced the Speaker Mr. Sanjeev Balan, Senior General Manager – Manufacturing Engineering, TAFE to the participants.



Mr. Sanjeev Balan gave a wonderful lecture on the Digital Manufacturing and also he patiently answered all the questions raised by the participants without any hesitation.

Mr. S. Shanmugam, Vice Chairman, SAEISS gave a short speech on the long term activities planned by SAEISS for the Industry Institute relationship. Mr. S. Shanmugam, Vice Chairman SAEISS and Mr. Kumaran Bharatheedasan, Lecture Meeting Champion thanked the speaker for his enlightening lecture and presented Memento to the speaker as a token of gratitude.

Mr. Kumaran Bharatheedasan, Lecture Meeting Champion thanked all the participants and requested their continued support for the future programs also.



Dr. Arun Bhardwaj shared his experience with the participants of the lecture meeting. Mr. V. Lokesh explained the patentable ideas and the skills required to acquire it.

Mr. S. Selvamani, Past Chairman, SAEISS gave a short speech on the activities planned and requested the volunteers to get enrolled for section activities. Mr. S. Selvamani, Past Chairman, SAEISS thanked the speaker for his lecture and presented the Memento to the speakers as a token of gratitude.

Mr. Kumaran Bharatheedasan, Lecture Meeting Champion thanked all the participants for participating in the lecture meeting and requested their continued support for the future programs also.

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## LECTURE MEETING – FUNCTIONAL INNOVATION:

Lecture Meeting program on “Functional Innovation - A Systematic Approach to Drive Patentable and Profitable Ideas” was organized by SAEINDIA Southern Section on 21st May 2016, Saturday at Lemon Tree Hotel, Guindy. Dr. Arun Bhardwaj, Principal - Innovation Practice and Mr. V. Lokesh, Managing Director Principal-Innovation and IP Practice delivered their lecture to the professional members of SAEISS.

Mr. Kumaran Bharatheedasan Lecture Meeting Champion SAEISS gave speech about ongoing SAEISS activities and future activities to all the participants and invited them to be an active SAEISS Volunteers. Mr. Kumaran Bharatheedasan introduced the Speaker Dr. Arun Bhardwaj and Mr. V. Lokesh to the participants.

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## LECTURE MEETING –TRENDS IN NVH HISTORY, TECHNICAL ISSUES AND CHALLENGES:

Dr. Rajendra Singh, Emeritus Professor, Dept. of Mechanical and Aerospace Engineering, Ohio State University, Columbus, USA delivered a lecture organized by SAEINDIA Southern Section on “Trends in NVH History, Technical Issues and Challenges” on 22nd May 2016, Sunday at Lemon Tree Hotel, Guindy. Mr. Kumaran Bharatheedasan / Lecture Meeting Champion SAEISS gave speech about ongoing SAEISS activities and future activities to all the participants and invited them to be an active SAEISS Volunteers.



## LECTURE MEETING – DIESEL ENGINE EMISSION CONTROL:



Mr. Selvamani, Past Chairman, SAEISS greeted Dr. Rajendra Singh with the bouquet and shawl. Mr. Kumaran Bharatheedasan introduced the Speaker, Dr. Rajendra Singh to the audience.

Dr. Rajendra Singh highlighted the trends in NVH History, Technical Issues and Challenges. He had covered various insights of technologies related to NVH. He explained the various factors contributing to noise in the vehicle such as Aerodynamic Noise, Powertrain Noise, Intake Noise, Exhaust Noise and Gear Noise are addressed in a more logical and coherent manner. The importance of developing light weight components and its impact on Noise and Vibrations were presented in an excellent manner during the lecture meeting. He also covered some mathematical equation governing the excitation frequency. In addition, he also briefed about the 2 credit course system related to NVH at IIT-M which had been introduced in May-2016.

Mr. S. Selvamani, Past Chairman, SAEISS gave a short speech on the activities of SAEISS and requested for the Industrial volunteers to enrol for the section activities.

Mr. Kumaran Bharatheedasan, Lecture Meeting Champion thanked the speaker. Mr. T.R. Sathyaranarayanan SAEISS treasurer presented the memento to Dr. Rajendra Singh as a token of gratitude.

Vote of thanks was delivered by Mr. Kumaran.

SAEINDIA Southern Section organized a special Lecture Meeting in memory of Dr. B.S. Murthy on 18<sup>th</sup> June 2016, Saturday at Lemon Tree Hotel, Guindy. Mr. C. Prakash Training & Development – Product Development Division Ashok Leyland delivered a lecture on “Diesel Engine Emission Control”.

Mr. S. Sriraman Chairman SAEISS presided over the lecture session.

Mr. C. Prakash explained various emission control measures adopted by the industry and the technology for meeting the upcoming emission norms.

Mr. Kumaran Bharatheedasan, Lecture Meeting Champion thanked the speaker. Mr. S. Sriraman, Chairman, SAEISS presented a memento to the speaker as a token of gratitude. Mr. S. Shanmugam, Vice Chairman, SAEISS thanked the speaker and all the participants for participating in the lecture meeting and requested their continued support for the future programs also.

## TOPTECH – AUTOMOTIVE SUSPENSION SYSTEM:

Toptech program on “Automotive Suspension System” was organized by SAEINDIA Southern Section on 6th & 7th May 2016, at Hotel Radha Regent, Chennai.





Mr. B. Srinivasan, MC Member welcomed all the participants and the speaker on behalf of SAEINDIA Southern Section and introduced the speaker to the participants.

Mr. B. Balaji had enlightened the participants covering the basics to detailed insights of suspension system. He also gave video presentation for the participants regarding the testing conditions and software used for the Automotive Suspension System design. The participants were also thrilled with his caliber and the way he handled the session.

Mr. S. Mubarak Hameed, MC Member SAEISS graced the valedictory session on the second day evening and thanked everyone for attending the toptech program. He also thanked the speaker for his sharing of knowledge and felicitated the speaker with the memento.

Mr. S. Mubarak Hameed also distributed the certificates to the participants in the valedictory function. At the end of the session participants thanked the faculty for his wonderful session and appreciated his energetic presentation.

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## **TOPTECH – DESIGN OF HYDRAULIC SYSTEMS:**

Toptech program on “Design of Hydraulic Systems” was organized by SAEINDIA Southern Section on 24<sup>th</sup> & 25<sup>th</sup> June 2016, Friday & Saturday at Hotel Lemon Tree, Chennai.

Speaker: Mr. R. Venugopal, Fellow, CVRDE

Dr. S. Senthilkumar, Toptech Champion welcomed all the participants and speaker on behalf of SAEINDIA Southern Section. He then described about the Toptech Program. Mr. M. Khader Basha introduced the speaker to the participants and briefed about his vast experience in the field of Hydraulics.

Mr. R. Venugopal explained the aspects of Design of Hydraulic Systems to the participants by using appropriate examples and industry conditions. He also explained the importance of manual calculation of Design of Hydraulic Systems over the design software. He shared his experience in designing the hydraulics systems by various testing procedures.

Mr. R. Venugopal started with the basics of hydraulic systems and explained in such a way that even a fresher could understand the Hydraulics basics. Then he covered fundamentals of hydraulics, valves, selection criteria of pipe lines and hoses for the hydraulic lines. Then he took the session on design of gear pumps & servo valves and more importantly fault diagnosis and its reasons to design a hydraulic system without malfunctioning. Also he gave adequate case studies and citing examples on design of hydraulics, development and testing to the participants.

During the valedictory program, Mr. R. Venugopal distributed certificates to the participants. Mr. T. R. Sathyanarayanan, Treasurer, SAEISS thanked all the participants for their wonderful support throughout the program. He also thanked the Speaker for his excellent lecture and support.

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## **FACULTY INTERNSHIP PROFESSIONAL DEVELOPMENT TRAINING:**

SAEINDIA Southern Section organized faculty internship professional development training program in association with SIEMENS PLM on three softwares viz,

- 1 Dimensional model based systems,
- Plant layout simulation and
- JACK simulation for the SAEISS faculty members.

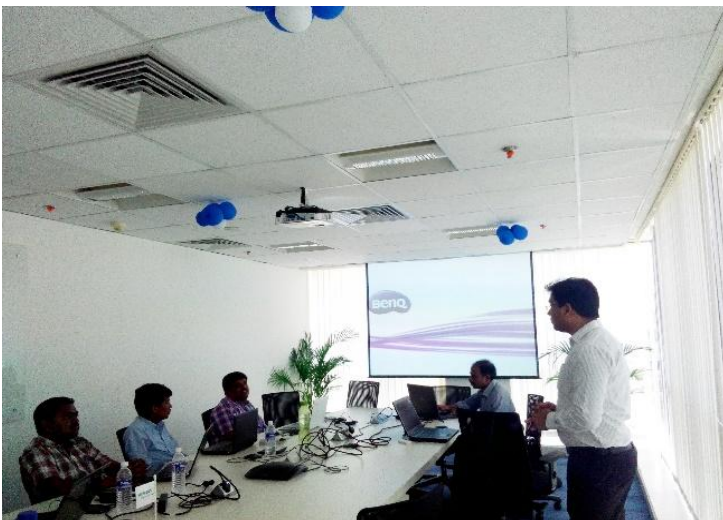
Nearly 33 faculties were benefited by this program.

#### A. 1 DIMENSIONAL MODEL BASED SYSTEMS:



“1 Dimensional model based systems” was conducted on 8th to 10th June 2016 at SIEMENS software Ltd, Egmore. Mr. M. Murugadass Kannan, SIEMENS was the faculty for “1 Dimensional model based systems”. He explained how to control the vibrations in hydraulic systems. During the Valedictory session Mr. S. Shanmugam, Vice chairman SAEISS and Dr. R. Rajendran, Champion SIEMENS Training program distributed the certificate to the participants.

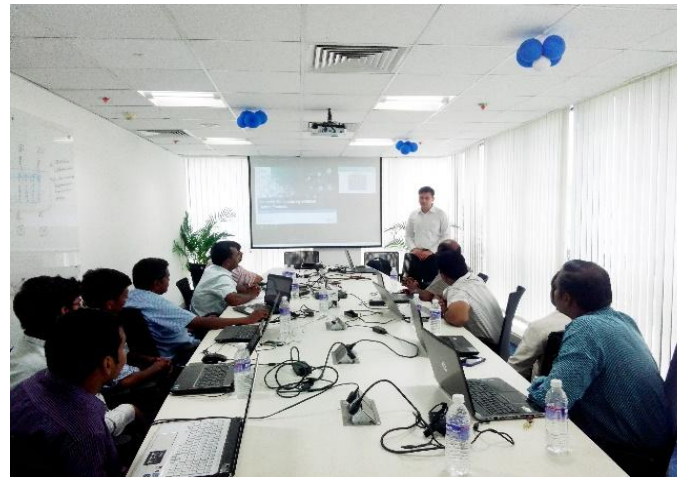
#### B. PLANT LAYOUT SIMULATION:



“Plant layout simulation” was conducted on 13th to 15th June 2016 at SIEMENS software Ltd, Guindy. Mr. M. Sushil Jain, SIEMENS was the faculty for “Plant layout simulation”.

He explained how to organise the plant layout for a manufacturing set up. During the Valedictory session Mr. B. Kumaran, distributed the certificate to the participants.

#### C. JACK SIMULATION:



“JACK simulation” was conducted on 15th to 17th June 2016 at SIEMENS software Ltd, Guindy. Mr. M. Amangarg, SIEMENS was the faculty for “JACK simulation”. He explained the various aspects of JACK simulation software and its use in the industry.

During the Valedictory session Mr. T. Kasiraja, Joint Treasurer SAEISS and Mr. Aiyappan Ramamurthi Member & Vice-chair distributed the certificate to the participants and thanked all the participants for attending SIEMENS training program.

All the faculties expressed their gratitude towards the training program and also thanked the effort taken by SAEISS and SIEMENS for the training program.



## SAEINDIA Section News - Western Section

### WORKSHOP - TEACHING METHODS & STRATEGIES:



2-Day the Workshop was conducted on “Teaching Methods & Strategies” at ARAI, Pune on 15<sup>th</sup> & 16<sup>th</sup> April 2016. The speakers for this workshop were as below:

- Dr. K. C. Vora, Sr. Dy. Director, ARAI
- Ms. Anja Cudok, Technical University of Borunschewig
- Mr. Theodor C. Schultz, Technical University of Borunschewig

Various topics were covered during the programme as follows:

- Introduction: Why Planning Lectures?
- Methods in Teaching: Model of Structuring Lectures
- Methods in Teaching: Activation
- Methods in Teaching: Knowledge Transfer and Active Learning
- Methods in Teaching: Consolidation and Conclusion
- Four Board Teaching (FBT) Method
- Performance Management for Faculty
- Examples of Engineering Methods in Teaching
- Powerful Presentation
- Proposals of Application Examples (Participants)
- First Practical Phase: Planning Lectures
- Second Practical Phase: Preparing Application Examples
- Presentation of Application Examples

This workshop was attended by academicians. It was well appreciated by participants.

### LECTURE MEETING – AUTONOMOUS CARS:



The Eminent Speaker Series Lecture on “*Autonomous Cars : journey from passion to invention*” was organized on 22nd April, 2016 at ARAI, Pune, which witnessed participation from engineers, scholars in the discipline of engineering. The speaker for the lecture was Dr. Roshy John, Practice Head, Robotics and Cognitive Systems, TCS.

Dr. K.C.Vora, Vice President, SAEINDIA, welcomed all the participants and Introduced Dr. Roshy John.

Dr. Roshy John Dr. Roshy John did his Ph. D. in Robotics from NIT, Tiruchirappalli, with more than 12 years of experience in developing robots for different Industries such as high tech, consumer electronics, automotive, retail and banking. His major research interest is in robotics and automation that helps to replace humans from mundane and repetitive tasks, mainly in Banking, Retail and Automotive applications.

He has 16 granted patents filed in robotics, consumer electronics and software algorithms. Prior to TCS he was working with LG Electronics as a Senior Scientist managing the consumer robot product R&D.

He and his team have recently built what is in essence a customizable autonomous car kit. While he hasn't built a car himself, he has managed the arguably even more daunting task of retrofitting a car with the hardware needed to drive itself.

Mr. Prakash V. Sardesai felicitated Dr. Roshy John with a Memento as a token of appreciation.

## AWIM SAEINDIA Team - USA

### GLIMPSE OF SAEINDIA AWIM TEAM @ USA:



AWIM SAE INDIA TEAM



SAEINDIA DELEGATION WITH SAE INTERNATIONAL PRESIDENT



SAE MEDAL OF HONOR - BHARAT VEDAK



WITH TOYOTA CHAIRMAN TAKESHI UCHIYAMADA



## SAEINDIA Section News - Bangalore Section

### COLLEGIATE CLUB INAUGURATION:



'SAEINDIA Bangalore section inaugurated SAEINDIA ALLIANCE collegiate club led by Chairman Mr. Munirathnam Javaji, followed by Mr. KP Murthy & SAEINDIA BS official Mr. Purushotham S Joshi who continued his technical talk on BAJA ATV.

The event was well witnessed by more than 100+ students & institute professors. Student Member Mr. Shubhangh Joshi & his team were the key successful people who lead this event.

### MEMBERSHIP DRIVE – GM TECHNICAL CENTRE:



SAEINDIA Bengaluru section organized membership drive at General motors technical centre Bengaluru, followed by managerial tech talk on 21st century manager by Mr. Aaron Watson Accomplished Speaker, Coach and Mentor.

This event was witnessed by more than 250+ employees from GM. Also the event recorded to be one of the highest professional membership drive from SAEINDIA from its Bengaluru section, getting on board of 189 Members in one go.

The event success goes to Management committee member Mr. Vijayakanth Damodaran from GM also the support from the top management Mr. Brian Macmurry -VP Technical Centre, followed by Bengaluru section Chairman Mr. Munirathnam Javaji and SAEINDIA BS officer for Business development Mr. Purushotham S Joshi for his overall coordination.

### TECHNICAL TALK:



NVIDIA hosted SAEINDIA BS, Management committee meeting at its state of art facility - Manyata tech park -Bengaluru. Highlights of the event , NVIDIA demonstrated its Supercomputing & Deep learning technology for Automotive & Aerospace fraternity.

SAEINDIA BS Management committee appreciated Mr. Shivasankaran & his team on their excellent approach to make this event happen.

Key person who lead to the event success was Mr. Sivasankaran from Nvidia & Mr. Munirathnam Javaji - Chairman of SAEINDIA BS.

### Dignitaries present from NVIDIA:

- Vishal Dhupar - Managing Director, NVIDIA South Asia.
- Sundara R Nagalingam – Head , Manufacturing and Energy Segments
- Sivasankaran L – Head, Strategic Initiatives



## COLLEGIATE CLUB INAUGURATION:



SAEINDIA BS , inaugurated ACSCE college of engineering SAEINDIA collegiate club. The chief guest for the event was, Mr. KP Murthy vice chair SAEINDIA BS, who addressed the students through his motivational speech.

Followed by technical session from Mr. Purushotham S Joshi on SAEINDIA Baja ATV vehicle. SAEINDIA BS appreciates Mr. Neril Lester Lobo & his team for their all round efforts in forming the SAEINDIA collegiate club.

## WORK SHOP FOR PROFESSIONAL MEMBERS:



SAEINDIA Bangalore section organized an exclusive workshop for its professional members on 11<sup>th</sup> June 2016, named "Know your car How to handle when break down" at Navinith Motors BMW. Chief trainer Mr. Munirathnam Dhananjayan (DJ), Managing Director, Focus Engineering & BMW group, Certified After Sales Consultant lead the workshop. The workshop was well attended by 40 Professionals in 2 batches, Morning & afternoon.

The session was carried out with spectacular display on various models of BMW followed by theory session. The key highlight was on the next generation of hybrid versions car i.e. BMW i8.

The key MC member who led for this successful event are Mr. Munirathnam Dhananjayan (DJ); Mr. Munirathnam Javaji- Chairman SAEINDIA BS & SAEINDIA BS official Mr. Purushotham S Joshi for his overall coordination.

### Issue 15 - Supported by

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