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## Upcoming Major Events

Feb 2014  
BAJA 2014  
In NATRiP, Indore

Jun 2014  
Controller Area  
Network (CAN) for  
Vehicle Applications

Jun 2014  
In-Vehicle Networking  
with LIN and FlexRay  
Applications

Jul 2014  
SUPRA 2014  
MMRT, Chennai

Nov 2014  
Advanced Product  
Quality Planning  
(APQP) Workshop

## National Olympics of AWIM 2013

One of the SAEINDIA's flagship annual events, the Indian National Olympics of 'A World In Motion' (AWIM) for the year 2013 was held between the 21<sup>st</sup> and 23<sup>rd</sup> December, 2013. SAEINDIA Bangalore Section played host to this National Olympics at *The International School Bangalore (TISB)* in Bangalore. The National Olympics turned out to be a huge success with a participation of 13 regions from across the country. The 13 regions included Bangalore, Chakan, Chandigarh, Chennai, Delhi NCR, Haridwar, Indore, Kancheepuram, Mumbai, Nagpur, Nashik, Pune and Zahirabad. With a total of 136 children and nearly 100 teachers, student volunteers and industry volunteers gathering under one roof, Bangalore witnessed the culmination of the best minds of the children across the country.

AWIM 2013 Exhibition was followed by the Inauguration Ceremony to officially launch the AWIM 2013 Indian National Olympics. The inauguration ceremony was presided over by Dr. Rao Chalasani, Director of Advanced Motor Development, General Motors Technical Center India as the Chief Guest.

The following day was the day keenly awaited by all the children who had put in great efforts to prepare for the National Olympics, 22<sup>nd</sup> Dec, 2013 was the day of the competition. 26 Jet Toy teams and 8 Skimmer teams participated.

The students were also required to present their concept toys to a jury comprising of members from various areas across the society. The day ended with the conclusion phase of the Engineering Mela. 4-wheeler

engine-cut sections from General Motors, a scaled model of electric rail from GE Transportation, 2-wheeler engine models from TVS Motor Company, robotic learning models from Icre8one, aero-model gliders from Mr. Dinesh M. and team, off-road vehicles built and presented by students from MVJCE and MVIT, Bangalore were some of the key highlights of the exhibition. The Engineering Mela had with Mr. Akhil Rabindra, a young racing prodigy from Bangalore, representing India at the world stage, shared his story and experience in the area of motorsport. The day concluded with prize distribution and closing ceremony which had Mr. Ramji Raghavan, Chairman Agastya International Foundation the as Chief Guest he shared his thoughts about the importance of learning and adopting non-traditional methods of learning.

AWIM 2013 India National Olympics JET TOY		
Category	City	School / Name
Overall Winner	Indore	New Digamber Public School
Overall 1 <sup>st</sup> Runner up	Chennai	Maharishi Vidhya Mandhir
Overall 2 <sup>nd</sup> Runner up	Delhi NCR	Delhi Public School

AWIM 2013 India National Olympics SKIMMER		
Category	City	School / Name
Overall Winner	Delhi NCR	Tagore International School
Overall 1 <sup>st</sup> Runner up	Nashik	Wisdom High International School
Overall 2 <sup>nd</sup> Runner up	Bangalore	Shishya School, Hosur

## SAEINDIA

### SAEINDIA Managing Committee Members.

**Mr. Shrikant R. Marathe**  
President

**Mr. R.Dayal**  
Immediate Past President

**Dr. Aravind.S Bharadwaj**  
Sr.Vice President & Chair, Finance Board

**Dr. R.K.Malhotra**  
Vice President & Chair, Meeting & Exposition Board

**Dr. Bala K. Bharadvaj**  
Vice President & Chair, Aerospace Board

**Dr. Arun Jaura**  
Vice President & Chair Automotive Board

**Mr. I.V.Rao**  
Chair, Membership Board

**Mr. Asit K Barma**  
Chair, Publication Board & Web/Media

**Mr. C.V.Raman**  
Vice Chair, Publication Board & Web/Media

**Mr. Ramesh S.Pasarija**  
Secretary

**Ms. Pamela Tikku**  
Joint Secretary & Chair, Section Board

**Dr. G.Nagarajan**  
Treasurer & Vice Chair, Finance Board

**Mr. G.Vijayan**  
Joint Treasurer & Member, Finance Board

**Dr. K.C.Vora**  
Chair, Development Board

**Prof. S.K.Gupte**  
Vice Chair, Development Board

**Mr. Sanjay P.Deshpande**  
Vice Chair, Membership Board

**Mr. Prakash V Sardesai**  
Chair, PDP Board

**Dr. S.Thirumalini**  
Chair, Engineering Education Board

**Mr. Devendra Bahirat**  
Chair, Off-Highway Board

**Mr. A. Akbar Badusha**  
Vice Chair, Meeting & Exposition Board

#### Representing SAE International

**Dr. David. L. Schutt**

**Mr. Murli M. Iyer**

### Mobility Engineering



The publication, “*Mobility Engineering*” is being launched by SAEINDIA and SAE International on the inaugural day and would be a significant landmark in Knowledge sharing and dissemination with a wide coverage on topics encompassing all the three verticals Auto, Aerospace and Off Highway.

*Have U Registered???*

**SAEINDIA**

3 - Day Workshop on

**Vehicle Dynamics for  
Passenger Cars  
&  
Light Trucks  
by**

**Dr. Richard Lundstrom**

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## SAEINDIA

### SIMCOMVEC 2013

#### Inaugural Function on Dec 4, 2013

On Dec 4, 2013, SAEINDIA, the premier professional society and the largest affiliate of SAE International, USA, kick-started the SIMCOMVEC - 8<sup>th</sup> SAEINDIA International Mobility Conference and the 1<sup>st</sup> Commercial Vehicle Engineering Congress focused on 'Technologies for Safe, Green and Connected Vehicles'. About 850 delegates from the global and domestic automotive industries participated in the event. The conference attracted delegate registrations from different organizations ranging from Hero Motors and Lucas-TVS to TAFE and Fiat-Chrysler. Besides MAHINDRA, MARUTI, ASHOK LEYLAND, etc. The conference provided a platform for exchange of ideas and knowledge to continue nurturing the growth path through solutions and opportunities for sustainable mobility technologies.



The four-day conference was inaugurated by His Excellency Dr. K Rosaiah, Hon'ble Governor of TamilNadu with Mr. Vinod Dasari, Managing Director, Ashok Leyland Ltd as the Guest of Honor. The inaugural ceremony was presided over by Mr. Srivats Ram, SIMCOMVEC Steering Committee Chairman & Managing Director, Wheels India Ltd. Additional dignitaries included Dr. Donald Hillebrand, President, SAE International, Mr. Shrikant R. Marathe, President - SAEINDIA and Director, Automotive Research Association of India (ARAI), Dr. David Schutt, CEO, SAE International.

SIMCOMVEC 2013 provided an excellent opportunity for Industry experts, Government and Academia to get appraised on the latest technologies in the areas of Enhanced Safety, Emissions Technologies, Alternate Fuels and Powertrain, and Emerging Trends in Electronics and Vehicle Connectivity, to name a few.



While welcoming the dignitaries and the delegates, Mr. Srivats Ram, SIMCOMVEC Steering Committee Chairman, and Managing Director, Wheels India said, "The Indian automotive industry is emerging as the preferred choice of destination for automotive players across the globe. The need to understand the mobility challenges of growing urban cities in the country and find safer and greener technologies will help in integrated transportation network."





## SAEINDIA

Delivering the special address, the Guest of Honor, Mr. Vinod Dasari, Managing Director, Ashok Leyland Ltd said, "Commercial Vehicle manufacturers in India have consistently risen to the challenge of designing vehicles capable of withstanding harsh environment, low maintenance, and over loading while simultaneously carrying more than 25 million passengers in their buses and transporting goods across rugged terrains in their trucks. In order to enable the industry to meet future emission norms, especially in the CV segment, he insisted on a clear cut fuel policy and availability of low sculpture fuel."



Dr. Donald Hillebrand, President - SAE International, said, "This is the first ever event being organized in India which is presenting a platform for synergy in technologies for commercial vehicles and personal mobility. India has been under the global spotlight for being a dynamic automotive market with frugal engineering at its fore. This conference will help identify best practices and standardize technologies for the future."



His Excellency, Dr. K. Rosaiah, Governor of Tamil Nadu, highlighted the continued support being provided by the Government in promoting investment in the Automotive industry and said, "The automotive cluster in South India is the biggest in the country with 35% of the revenue share. "He added" I am proud to be associated with the city of Chennai, touted as the Detroit of India as this city has been successful in attracting investment and talent pool particularly in the automotive industry with active support from the Government."



In his concluding remarks, Mr. Shrikant R. Marathe, President, SAEINDIA, Director, Automotive Research Association of India (ARAI) said, "We are delighted to host SIMCOMVEC as it allows us to bring global and Indian automotive leaders to showcase their technologies that address the needs of sustainable mobility solutions for today and the future. These technologies have become a competitive advantage for manufacturers and are gaining wide acceptance with customers. India is making significant contribution towards R&D for such technologies".

His Excellency, Dr. K. Rosaiah, Governor of Tamil Nadu, then inaugurated the Exposition which saw participation from more than 75 exhibitors who showcased their technologies and new products in addition to the vehicle display from the leading automotive OEMs. The vehicles displayed in the Exposition included Ashok Leyland's LCV

## SAEINDIA

and Jan Bus; Mahindra's XUV 500, bi-fuel Hydrogen vehicle; ARAI's vehicle rigged with equipment for structural dynamics, Mahindra-Reva's e2O, Toyota's Etios, and Hyundai's grand i10.



SIMCOMVEC has set a benchmark on bringing multiple stakeholders under one roof and creating awareness on recent innovations in various technologies. It has opened up new partnership avenues for Industry, academia, and Government institutions enabling healthy exchange of ideas and making this event the most sought after by the mobility practitioners.

### Plenary and Technical Sessions

As part of the screening process of technical abstracts and manuscripts, SIMCOMVEC Technical Committee followed the specially developed system of SAE International 'MyTechZone'. Technical Paper Review Committee (TPRC) comprising of 35 experts from industry and academia reviewed the draft manuscripts. The conference attracted a total of 270 abstracts which resulted into 141 manuscripts spread over 15 technical sessions.

SIMCOMVEC finally brought a basket of technical feast through 115 SAE papers presented personally by the authors from India & abroad, who are experts in their specific domain.

We had 10 international papers out of 115. These papers were presented in four parallel sessions over four days totaling to 32 Technical sessions. The details of international papers are summarized below.

S. No.	Topic	No of Papers	Organization(s)
1	Advanced Engine Technology	2	Achates Inc (USA), Moscow St Tech U (Russia)
2	Safety & Crash Worthiness	2	Applus IDIADA (Spain), STA (Russia)
3	Simulation & Modeling	1	Inst of Control Sciences
4	Hybrid Electric Vehicles	1	Applus IDIADA (Spain)
5	Advanced Electronics	1	AVL (Austria)
6	Noise Vibration Harshness	1	LMS (Belgium)
7	Emission Control	1	Applus IDIADA (Spain)
8	Virtual Prototyping & Testing	1	China



These papers gave a 360 degree view on the following 15 technical domains, which saw 10 key note presentations.

- Advance Engine Technology (15 papers)
- Alternative Fuels (7 papers)
- Emission Controls (3 papers)
- Advances in HVAC Systems (3 papers)
- Simulation & Modeling (32 papers)
- Automotive Electronics (4 papers)
- Hybrid & Electric Vehicles (11 papers)
- On-Board Diagnostics (4 papers)
- Noise Vibration & Harshness (11 papers)
- Safety & Crash Worthiness (8 papers)
- Advanced Materials (3 papers)
- Advanced Manufacturing (4 papers)
- Braking & Steering Systems (4 papers)
- Suspension Systems (3 papers)
- Virtual Prototyping & Testing (3 papers)

In addition to the technical presentations, the delegates had a wonderful opportunity to listen to the lectures from 8 plenary speakers who touched upon wide gamut of topics such as

- Advanced Vehicle Technology Research at U.S. National Labs - Dr. Donald Hillebrand of SAE International, USA
- Skill Development for Employability - Mr. Dilip Chenoy of National Skill Development Corporation, New Delhi
- Improving Safety on Indian Roads - Technologies and Policy Changes Required - Mr. Randall B. Clark of Michelin, USA
- Emission Technologies in Commercial Vehicles - A Global Perspective - Mr. Tom Stover of Eaton Corporation, USA
- Advanced Engine Technologies for Improving Commercial Vehicle Fuel Efficiency - Mr. Lukas Walter of AVL, Austria

- Emerging Trends in Electronics & Vehicle Connectivity - Mr. Joerg Lutzner of Continental, Germany
- On Board Diagnostics - Dr. Venkat Srinivas of Ashok Leyland Ltd, Chennai
- Mass Transportation Opportunities and Challenges - Mr. Vikram Kapur, IAS - Commissioner of Chennai Corporation

### Panel Discussion

The highlight of the Conference was the Panel Discussion moderated by Dr. Arun Jaura, Managing Director of Traktion, with participation from leaders encompassing the entire mobility industry. The topic was rightly chosen as "Developing Tomorrow's Synergistic Solutions for Commercial & Personal Mobility in Emerging Markets". The list of panelists included

- Mr. Bharat Vedak - Vice President, India Technical Center & DCV, John Deere
- Mr. Shrikant Marathe - President, SAEINDIA and Director ARAI
- Mr. T. Sarangarajan - Vice President, Hyundai Motors
- Mr. Donald Schulte - Managing Director, PACCAR
- Dr. Chandan Chowdhury - Managing Director, Dassault Systems
- Dr. Aravind Bharadwaj - Head Technology, M&M TPDS

Mr. Bharat Vedak touched upon the differences in cab design for off-highway vehicles between India and developed countries, as there is a tendency for people in India to use the cab as a temporary shelter/comfort zone during off-working hours while this is not the case in advanced countries where the comfort in the cab during off-working hours is not an issue.



## Valedictory Function on Dec 7, 2013



Mr. Shrikant Marathe elaborated upon the homologation requirements and the vehicle certification that his organization has been working closely with different vehicle segments towards achieving synergy. Mr. Sarangarajan exhorted the mobility engineering community to appreciate the "emotional aspect" an owner has towards his/her vehicle so field issues etc are not viewed/solved from an engineering perspective alone. Mr. Donald Schulte shared his experiences of working in USA and in India CV market highlighting the expectations of these markets and how the advanced technologies have to be rightly fitted to find their place in emerging markets. Dr. Chandan Chowdhury urged the mobility practitioners to believe in the capability of their own community and challenged the automotive industry executives to move towards zero physical prototypes through enhanced virtual prototype build and simulation. Dr. Aravind Bharadwaj connected with the audience through latest technologies in alternate powertrain and Advanced Telematics and how Indian engineers need to leverage frugal engineering to overcome the unique challenges faced by the industry.

The SIMCOMVEC Conference was successfully concluded on Dec 7, 2013 with Dr. T. Ramasami Secretary – Department of Science and Technology, Government of India, as the Chief Guest and Dr. Pawan Goenka as the Guest of Honor. Additional dignitaries on the dais included Dr. Donald Hillebrand, President of SAE International, Dr. David Schutt, CEO of SAE International, Mr. Shrikant R. Marathe, President of SAE India, Dr. Aravind Bharadwaj, Sr. Vice President of SAEINDIA, and Dr. Arunkumar Sampath, Chairman, SIMCOMVEC Organizing Committee.



In his welcome address, Mr. Shrikant R. Marathe, President, SAEINDIA, Director, Automotive Research Association of India (ARAI) said, "We are delighted to have successfully conducted SIMCOMVEC for the first time in India that saw overwhelming participation from the industry in the form of sponsorships, Plenary speeches, Technical paper presentations, Panel Discussion, delegate registrations, and Exposition. He urged the mobility community to continue to support SAEINDIA initiatives in organizing more such events".



In providing the Summary of the 4-day event, Dr. Arunkumar M. Sampath, Chairman, SIMCOMVEC Organizing Committee said, "We are extremely pleased to inform that this conference has significantly outperformed the earlier Mobility Conferences in terms of number of sponsors, number of technical papers, and number of

technical sessions and has been on par with the earlier conference, APAC16 2011, in terms of delegate registrations, paper presentations, and sponsorships. The event touched upon different aspects of mobility in line with the theme of the conference and also provided a forum to stress the importance of skill development for employability and also mass transportation opportunities and challenges."



Dr. Pawan K. Goenka, Patron of SIMCOMVEC said, "Though Indian market has been steadily growing to reach sixth position in personal mobility space, recent statistics on Product Development indicate that less than 10% of the design activities are carried out in India. The situation is a little better for CV segment where about 90% of the design is carried out domestically. Automobile wars are today fought in R&D centres and not in showrooms. Enhanced design and development activities within the country will give global recognition to India and the necessary sustainability to the industry."



Dr. T. Ramasami, Secretary, Department of Science & Technology, Government of India, said,

"Automobile R&D is a priority sector for the Government. A long-term plan document is under preparation for putting together a technology mission which includes mobility and transportation as key components. Investments in technology and development by different automotive organizations are being viewed as Corporate Social Responsibility (CSR) initiatives, which the Government is willing to consider favorably for tax benefits and concessions."

Dr. K.C. Vora, Chairman, SIMCOMVEC Technical Committee, announced the awards for different categories such as Best Domestic paper, Best International paper, Best Student paper, Best Oral Presentation, Best Stall etc which were handed over by the dignitaries on the dais.

Dr. Donald Hillebrand, President - SAE International, said, "The past four days have been a wonderful experience wherein SAE International and SAEINDIA came together to successfully pull together a large event of this magnitude. This conference will help identify best practices and standardize technologies for the future."

While congratulating the team for successfully conducting the program Dr. David Schutt, CEO - SAE International, said, "This conference is just the beginning of joint activities planned between SAE International and SAEINDIA. Many areas of cooperation have been identified for joint efforts including Professional Development programs, technical magazines, and enhancing of SAEINDIA brand."

A Vote of Thanks was given by Dr. Arunkumar M. Sampath, Chairman, SIMCOMVEC Organizing Committee.

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## Professional Development Programs

On Dec 2<sup>nd</sup> and 3<sup>rd</sup>, two Professional Development Programs (PDPs) were conducted. In line with the theme of the Conference, One program focused on "Current and Future Safety Trends in Automotive Industry" and the second touched upon "Connected Vehicles". The PDP on Safety was organized with active participation from Mahindra, WABCO, and Applus IDIADA and the PDP on Connected Vehicles was organized with extensive support from Mahindra, Microsoft, Ford, and Vodafone.



The training programs saw about 40 registrations each from industry and academia. Live demo was arranged by WABCO for the participants who travelled to their test track in Ambattur to see firsthand the advancement of safety technologies. Ford and Microsoft showcased their development of SYNC in Ecosport vehicle while Mahindra gave the demo of Advanced Navigation System and Voice Activated Controls on their XUV500 W8 model to the participants.



## IPR & TOT CONFERENCE AT Bangalore, on 26<sup>th</sup> OCTOBER 2013

A one day workshop was conducted on 'Intelligence Property Right and Transfer Of Technology' on 26<sup>th</sup> Of October, 2013 at The Pride Hotels, Richmond Road. The expert speakers for the day were Mr. Neeraj Gupta, CEO, Formulate IP and Mr.Rakesh Prabhu,Partner,ALMT Legal. The first session was held by Mr. Neeraj Gupta on the topic *"Patent Portfolio Creation, Development, Management & Commercialization."* The second session was handled by Mr. Rakesh prablm on *"Transfer Of Technology."*



The event was very interactive and useful and hence was very successful.

## BANGALORE SECTION

### AWIM regional Olympics, 2013

AWIM regional Olympics, 2013 was held at The International School of Bangalore, Bangalore on December 7<sup>th</sup>, 2013, where 9 schools from different districts of Karnataka had participated in the event and Shishya school from Hosur, emerged as winners and qualified for the National Olympics, 2013 to be held on 21<sup>st</sup> and 22<sup>nd</sup> of December, 2013 at the same venue.



## SAEINDIA SECTION NEWS

Effi-cycle 2013 witnessed registration from 209 teams all across country, out of which only 80 teams were selected for the main event. These teams included IIT Guwahati, IIT Roorkee, IT-BHU Varanasi, IIT Rajasthan, BITS Hyderabad, Thapar University, PEC, IGIT Delhi and UIET itself.

Overall Winner - Northern India Engineering College, New Delhi

1st Runner Up - Krishna Institute of Engineering And Technology, Uttar Pradesh, 2nd Runner Up - Alagappa Chettiar College Of Engineering, Tamil Nadu.



students from different colleges presented their original technical work in the categories of Engine Research, Automotive Engineering and Mechanical Engineering.

Thereafter, all participating collegiate clubs had presented their collegiate club activities of the year 2012-13 and future plans. UPES was declared as the best Collegiate Club of the Year 2012-13 based on the achievements, participation in National reputed design competitions, internal activities and membership. Thereafter, workshop on Engine Technologies was conducted by Mr. Aditya Nanda and Mr. Jaspreet Singh from MSIL on current and recent trends and technologies on Engine Technologies. Overall the event was well appreciated by the student fraternity.

## NORTHERN SECTION

### Effi-Cycle 2013

Three wheels, eco-friendly designs and lots of creativity and intelligence were on offer as scores of budding engineers from across India got together at UIET and played for a unique event – Effi-Cycle, an inter-collegiate design – cum - race competition.

Punjab University's University Institute of Engineering and Technology (UIET) played host to Effi-cycle 2013 for the 4th season this year. The event challenges the undergraduate engineering students to fabricate a prototype of 3-wheel combination powered by human-electric hybrid power to produce a sustainable design solution in the awake of decreasing resources, thus justifying the theme of Go Green.

### SAENIS Student Convention

SAENIS Student Convention 2013 was held on 26<sup>th</sup> October 2013. The Student Convention saw more than 350 students from nine colleges and universities.

The convention was inaugurated by Dr. S.J. Chopra, Chancellor, UPES in the presence of Mr. D.N. Dave, Vice President, Body Design, MSIL & Vice Chair Membership, SAENIS, Mr. Deepak Sawkar, Vice President, Tech Admin, MSIL & Vice Chair student activities, SAENIS, Mr. Anup Kacker, Executive Director, SAENIS. The Inauguration ceremony was followed by the Car Design competition in which 46 students from different Universities/Institutes had participated. The students explained a Car design concept on the theme that was given on the spot. There was also a Technical Paper presentation where

### AWIM Regionals 2013

AWIM Regionals was inaugurated by Mr. Rakesh Sood (Vice Chairman-AWIM), Mr. Anoop Kacker (Executive Director- SAENIS) and Mr. Sandeep Raina (Co -Convener-AWIM).

AWIM'13 regionals saw 23 schools from Delhi NCR region participating in the Jet toy and 9 schools participating in the Skimmer Competition. The team from Tagore International School, Vasant Vihar emerged as the final winner of Jet Toy as well as Skimmer challenge. DPS, Rohini secured 2nd position in Jet Toy challenge and Bal Bhavan International, Dwarka secured 2nd position in Skimmer challenge. Winner will now compete for the Nationals which are to be held in Bangalore from 21st-23rd December'13. The event witnessed ardor and zeal amongst school children that made this event a successful one.

Congratulating the winners, Mr. I V Rao, Executive Advisor, MSIL & Director MACE and Dr. Tapan Sahoo,



Secretary, SAENIS & VP (Engg - ERDEXE), Engineering, MSIL shared the experience of teams which participated in the event and also took their feedback on the event.



## SOUTHERN SECTION Student Convention

It is one of the most important events in the activity calendar for SAEINDIA student members. This edition was successfully conducted on 11<sup>th</sup> & 12<sup>th</sup> October at Chennai Institute of Technology – Chennai.

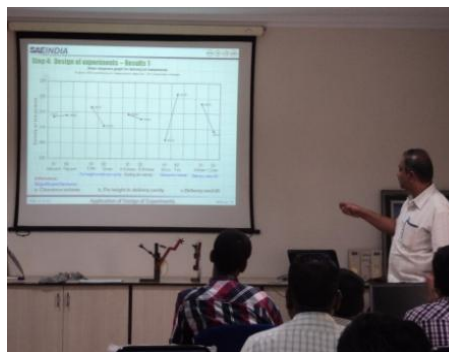
This event encourages student members from various collegiate clubs of SAEINDIA Southern Section to share, compete and learn. It is the festival of technology for students and all different forms of technical skill and knowledge pertaining to basic concepts of mobility engineering,



engineering design challenges, and technical theatres are all present in one roof during these two days. It is SAEINDIA Southern Section's flagship event for students and as every time, the response from the participating clubs and students was of extremely high quality. Student Convention was Inaugurated by Mr. P. Kaniappan – Whole Time Director – WABCO INDIA LTD

## Top Tech

A TopTech event is an intensive session of two days which is anchored by an eminent subject matter expert. It deals with one technical problem or process and the participants get to understand and discuss the subject threadbare. The expert also brings up the best practices on this subject with relevant examples.



Mr. S. Selvamani – Product Development Director Asia at WABCO Vehicle Control System conducted this program in SAEISS premises on the 18<sup>th</sup> & 19<sup>th</sup> of October – 2013. This was one of the most sought after programmes in the Top Tech series.

## Annual General Meeting and New Office Bearers

The Annual General Meeting of SAEINDIA Southern Section was conducted on 16<sup>th</sup> November at Accord Metropolitan Hotel – Chennai.



Dr Arunkumar Sampath, Chairman of SAEISS and Dr S. Thirumalini, Secretary of the outgoing Managing Committee (2011-13), presented detailed update on the activities undertaken in the section in the last one year.

Mr Srivats Ram, Managing Director of Wheels India was the Chief Guest of the event.



The new Managing Committee of SAEINDIA Southern Section took office from this date under the leadership of incoming Chairman, Mr N. Balasubramanian, GM - Product Development of Renault Nissan. Mr S. Shanmugam, MD of Design Desk



India, took over as the new Secretary. Dr P. Sivakumar, Director, CVRDE, is the new Vice Chairman. Mr T. R. Sathyanarayanan of Wabco India is the new Treasurer.

### AWIM Regional Olympics

AWIM Regional Olympics was successfully conducted at Amrita Vidyalayam – Chennai on 21<sup>st</sup> & 22<sup>nd</sup> November.



“A World in Motion” is a programme is designed to develop a sense of inquisitiveness and discovery towards mobility engineering among school children. Children also learn to undertake engineering problem solving while working in teams.

Students have an opportunity to discover the wonders of physical science through individual inquiry and team effort.

Inaugurated by Mr. T.A.B. Bharati - Vice President – Supply Chain – Wheels India Ltd



Total Schools Participated – 13

Total No of Teams – 26

Total Students - 104

Mr P. Sundararaman, Managing Committee Member incharge of AWIM programme, Mr S.Shanmugam, Secretary, and others were present at the occasion to encourage the young children who participated with full enthusiasm.

### WESTREN SECTION

#### PROJECT COMPETITION 2013

The Project Competition 2013 was organized by SAEINDIA Western Section at VIT, Pune on 28<sup>th</sup> September 2013 morning. Vishwakarma Institute of Technology had volunteered for this event, under the assistance of Prof.V.Kumar and Prof.S.P komble.

This event was organized to motivate the graduate students to demonstrate their skills, technical knowledge in field of Automotive Engineering. Students from all over the western section had participated in this event. Total 25 entries were received, due to time constraint only 17 entries were shortlisted for the event. The short listing of projects was done by the screening committee of VIT Pune.

The event began with Mr. Abhijit Umap and Ms. Rutuja Kale briefing the participants about the event and SAE day.



Following were the Judges at the competition who had graced the occasion with their presence:

- Prof. V. Kumar, Co-chairman, Student Activities, SAEINDIA Western Section.
- Mr. Sachin Jain, Senior Project Engineer ARAI.
- Mr. Ranjan Sridharan, Senior Project Engineer, ARAI
- Mr. Prashant Mahale, Chief Design Engineer, NVH, Bosch.
- Mr. N. B. Sahoo, Director, Emersons.

The following were 17 projects presented by the participants from different colleges in western region. The project titles are as follows:

- Design of mandrel of missile combustion chamber.
- Design and manufacturing of low cost 3 axes micropositioner.
- Design and manufacturing of fixture for angle measurement of fuel timing gear of ic engines.
- Loading unloading of component on CNC machines by using linear actuators.(BVDU COEP)
- Heat transfer enhancement in automobile radiator using nano fluids.(BVDU COEP)
- Design, Fabrication and installation of HYDRAM( DON BOSCO)
- CFD analysis of butterfly valve (DON BOSCO)
- Automated pick and pick pneumatic robot (SIDDHANT COE)
- Intelligent braking with track navigation system (SIDDHANT COE)
- Noise and vibration analysis of centrifugal lubrication oil cleaner (MODERN COE)
- Design of coke oven waste heat recovery boiler as per ibr and asme codes
- Experimental investigation of thermo hydraulic performance.
- Helical intake port.

- Design and manufacturing of hydrodynamic bearing test rig.
- Mechanical design and fabrication of tricycle for the disabled.
- Digital fuel quantity measurement.
- Design and analysis of reactive muffler – theoretical and experimental approach

The judges were divided into two panels,

Panel A: Prof. V. Kumar, Mr. Ranjan Sridharan, Mr. Prashant Mahale.

Panel B: Mr. N. B Sahoo , Mr. Sachin Jain



Each team was given 15 minutes to present their final year project. The presentation was followed by Question & Answers round from the Judges.

The Judges presented their view on the entire competition and commented on the projects contested for the competition. All the judges were very satisfied with the quality of the projects.

After all the presentations there was lunch break for about 60 minutes and during the break the judges perused

every project in detail and then decided the winners of the project competition. After lunch all the participants gathered in the seminar hall for the announcement of winners as well as for the prize distribution ceremony.

Prof V. Kumar announced the winners. Total 3 prizes were awarded and remaining all participants was given certificates of participation.



The first prize was given to Mr. Suraj Jamodkar and Mr. Bhushan Kakde (MIT) (Digital fuel quality measurement). They won Cash prize of Rs.10, 000 and a trophy.

The second prize was awarded to Ms. Shruti Loveena (JSCO), Experimental investigation of thermo hydraulic performance. They won cash prize Rs.7000 and trophy.

The third prize was shared by Mr. Ganesh Devkate and his team (BVDU COEP), Loading and unloading of components on CNC turning center by linear actuators) and Mr. Shubham Mogal and his team (VIT), Design of mandrel of missile combustion chamber. Both the teams won cash prize of Rs.2500 each and the trophy was shared.

After the prize distribution, Prof V. Kumar addressed all the students. He declared that SAE DAY 2014 will be volunteered by VIT SAE Collegiate branch again. Prof. V .Kumar's address was preceded by Address of Prof. H. G. Phakatakar (HOD, Mechanical Dept., VIT).

The event concluded with vote of thanks by Prof. S. P. Komble (Faculty Advisor, VIT SAE Collegiate Branch)

### AWIM Master Teacher & Volunteer Training Program

AWIM (**A World In Motion**) Master Teachers & Volunteers Training Program" was conducted successfully 21 September, 2013 at the Automotive Research Association of India, Pune. This training program witnessed response from industry volunteers and teachers from various schools. The training was focused on Skimmer activity of AWIM Curriculum. There was an overall participation of 30 attendees, including Industry Volunteers, Student Volunteers & Teachers.



**A World In Motion** (AWIM) is a teacher administered, industry volunteer assisted program that brings

Science, Technology, Engineering and Maths (STEM) education to life in the classroom for students. Developed by SAE International, AWIM aims to promote science and mathematics literacy of students in standard fifth through eight by providing curriculum materials for authentic engineering design activities in the classroom that support a multidisciplinary, co-operative working experience.



Volunteers from Industry play an essential role in motivating the next generation to pursue careers in science, technology & engineering by bringing their everyday experiences into an AWIM classroom. Each of the AWIM activities is designed around mathematics, science and technology which include laws of physics and electronics.

Across the world, many Corporatizes have committed their resources to support **A World In Motion**<sup>®</sup> programs. Numerous corporations within the mobility industry provide hundreds of employees who volunteer their time and talent to students and teachers in countless classrooms. In addition some industries provide

financial resources that have helped SAE to keep **A World In Motion** programs alive.

Dr. K. C. Vora, welcomed all the industry / student volunteers and teachers. It was followed by introduction by all the individuals. The training started with the introduction of SAE International and SAEINDIA, explaining the different activities conducted by these societies for different categories of members. Mr. Mihir Kulkarni of ARAI & Mr. Sagar Murugkar of SAEINDIA Western Section conducted the Training.

After the initial demonstration, the teams comprising 4 individuals were made, such that there would be at least two teachers and one industry volunteer with one student volunteer. There were 8 teams in total, for this event. The teams were asked to test the Skimmer on a table for directional stability. Teams were asked to build new sail patterns. They were also provided with chart papers to prepare presentation with a theme for their Skimmer.

Each team tested their Skimmer on corresponding tracks for Distance, Weight carrying capacity, Speed, Accuracy & Turning ability. The results for the each round were noted by respective team, for demo competition during the training program.



Mr. Saurabh Chitnavis presented on Track Description & Scoring along with Rules/Guidelines for the competition. They also presented science notes on simple physics for school children.



We have scheduled the AWIM Pune Olympics 2013 on Saturday the 14<sup>th</sup> December 2013, according to which the Teachers & Volunteers were asked to train the students.

Students from different colleges showed their active participation by their presence.

The auditorium was beautifully decorated by different flower arrangements; it was indeed an auspicious event.

The event began with welcome speech by Dr. K. C. Vora, Dy. Director, ARAI Academy & Co-ordinator, SAEINDIA WS.

The event commenced with Lighting of Lamp, where the honorable dignitaries lighted the lamp.

Mr. Marathe gave a brief speech about various events conducted by SAEINDIA. He also mentioned the goals set by SAEINDIA for coming years.



SAEINDIA Western Section organizes SAE Day where two events are conducted "SAEINDIA WS Project Competition" and "SAEINDIA WS Annual Social". Every year SAE DAY is held on Engineer's day but this year it was scheduled on 28<sup>th</sup> September.

Various dignitaries were present on that day along with Mr. Marathe, Director ARAI & Chairman SAEINDIA WS, Prof. V. Kumar, Co-Chairman (Student activities) SAEINDIA WS



There were 35 professional members from different companies who were present for this event.

All the Professionals and faculties from different colleges were felicitated with bouquet.



Managers who are involved in organizing Project Competition & Annual Social as well as the performers were felicitated by Prof. V. Kumar, Mr. H. G. Phakatkar, HOD (Mech) VIT PUNE and Mrs. V. Kumar. They were felicitated by a medal and certificate of excellence. It was because of their hard work that the event was a grand success.

Prof. V. Kumar (Co- Chair, SAEINDIA student activities) gave a short speech and also requested other colleges to conduct a joint program for next Annual Social and Project competition.



Prof. V. Kumar felicitated SAE faculty Advisors and few students of Yadavrao Tasgaonkar College as it's the newest SAE Collegiate Chapter. He also felicitated the compares of the evening, Ms. Prachi Kore and Mr. Abhijeet Umap and other Student members involved in the organizing committee.

Mr. Marathe felicitated Prof. V. Kumar & the staff from VIT college Including VIT SAE collegiate club faculty advisors.

Ms. Prachi Sanghvi (SAEIWS) proposed a vote of thanks on behalf of SAEINDIA WS and ARAI.

## SAEINDIA DIVISION NEWS

### INDORE DIVISION

#### AWIM Indore Division

SAEINDIA Indore Division has been organizing AWIM activity since last 4 consecutive years. To take this trend forward the division conducted the 5<sup>th</sup> consecutive local olympics under the able mentorship of Prof. Ajay Bhargava, Co-ordinated by Mr. Mayur Khandelwal, Prof Rajneesh Katarne and Supported by Mr. Akhand from SAEINDIA. The event was held on 1<sup>st</sup> December 2013 at Acropolis Technical Campus, Tillore, Indore.

Following Schools participated in the event.



1. The Daly College
2. New Digamber Public School
3. Prestige public School
4. Millenium School
5. Choithram International
6. Yashwant Public School
7. Billabong International
8. St. Raphels School
9. Wishwood Cottage School

The event started with an inagural function in the morning with Mr. Rahul Hasija, Chair Media and PR as cheif guest and Dr. S C Sharma Pricipal Acropolis Technical Campus as Guest of honour. Mr. S K Kanchan Seior teacher from DC and Prof Bhargav was also present at the dias. The cheif guest and the Guest of honour motivated the kids with their speech and wished them better furure. The Kids proceeded ahead with the jet toy making from 1100 Hrs for 2 hrs. Cleanliness and sportsmanship award was judged at that time. Dr. S C Sharma, Dr. Mahesh Phople, Prof Shailendra Pawar, & Mr. Akhand were judges for the presentation round. The audience enjoyed the presentations by the kids. Dynamic rounds were headed by Prof. Mayur Khandelwal, Mr. Pragyumna Patidar along with the team of 22 volunteers.

NDPS secured overall first from Indore followed by The Daly College Indore as runnerup and Choithram International as second runnerup.

The results were announced with a validictory function chaired by Dr. S C Sharma and Prof Ajay Bahrgava. They distributed the awards to the teams. Mr. Akhand Pratap Singh presented a vote of thanks.

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