



SIMCOMVEC 2013 Summary

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 - 8th SAEINDIA International Mobility Conference and 1st Commercial Vehicle Engineering Congress focused on 'Technologies for Safe, Green and Connected Vehicles'. About 850 delegates from the global and domestic automotive industry participated in the event with about 140 from Mahindra & Mahindra and 90 from Ashok Leyland. The conference attracted delegate registrations from different organizations ranging from Hero Motors and Lucas-TVS to TAFE and Fiat-Chrysler, a first of its kind in SAEINDIA history. 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 Tamil Nadu** 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, and **Dr. Arunkumar Sampath**, Chairman, Organizing Committee.

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.”

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 sulphur 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 Tamilnadu, highlighted the continued support being provided by the Government in promoting investment in the Automotive industry and said, “The automotive cluster in South India consisting of Chennai is the biggest in the country with 35% of the revenue share. 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 ICV 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 culminated 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 in 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. 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.

Valedictory Function on Dec 7, 2013

The SIMCOMVEC Conference was successfully concluded on Dec 7, 2013 with Dr. T. Ramasami participating 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 fought in R&D 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 marketing of SAE brand in India.”

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

Professional Development Programs



Top Tech on “Safety”



Top Tech on “Connected Vehicles”

On Dec 2nd and 3rd, two Professional Development Programs (PDPs) have been 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.

Press Coverage

On Dec 5th, there was extensive press coverage on the SIMCOMVEC inaugural ceremony in different websites and newspapers such as Hindu Business Line and Financial Express with additional 4 page supplement in Hindu Business Line. The post event press coverage was captured in multiple sites on the internet and newspapers such as Hindu Business Line on Dec 8th followed by a 2 page supplement in the Economic Times on Dec 9th.