

# SAEINDIA

## News

### SIMCOMVEC 2013 highlights

On Dec. 4, 2013, **SAEINDIA**, the premier professional society and the largest affiliate of **SAE International**, USA, inaugurated 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 Dr. K Rosaiah, Honorable Governor of Tamil Nadu with Vinod Dasari, Managing Director, Ashok Leyland Ltd. as the Guest of Honor. The inaugural ceremony was presided over by Srivats Ram, SIMCOMVEC Steering Committee Chairman & Managing Director, **Wheels India** Ltd. Additional dignitaries included Dr. Donald G. Hillebrand, 2013 President, SAE International; 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 be apprised of the latest technologies in the areas of enhanced safety, emissions technologies, alternative fuels and powertrain, and emerging trends in electronics and vehicle connectivity, to name a few.

In welcoming the dignitaries and the delegates, Ram 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 the integrated transportation network.”

Delivering the special address was Dasari: “Commercial Vehicle manufacturers in India have consistently risen to the challenge of designing vehicles capable of withstanding harsh environments, 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.” To enable the industry to meet future emissions norms,

especially in the commercial vehicle segment, he insisted on a clear-cut fuel policy and availability of low-sulfur fuel.

Said Hillebrand: “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.”



Conference entrance at the Chennai Trade Centre.



Chief Guest at the inaugural function of SIMCOMVEC was Dr. K Rosaiah, Honorable Governor of Tamil Nadu.

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**SAEINDIA's booth at the expo.**

Rosaiah highlighted the continued support being provided by the government in promoting investment in the automotive industry, saying: “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 at the event's inauguration ceremony, Marathe 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 toward R&D for such technologies.”

Rosaiah then inaugurated the exposition, which saw participation from more than 75 exhibitors who showcased their technologies and new products in addition to vehicle displays 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 e20, Toyota's Etios, and Hyundai's Grand i10.**

SIMCOMVEC has set a benchmark in 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 mobility practitioners.

### Plenary and technical sessions

As part of the screening process of technical abstracts and manuscripts, the SIMCOMVEC Technical Committee followed the specially developed system of SAE International's “MyTechZone.” The Technical Paper Review Committee comprising 35 experts from industry and

academia reviewed the draft manuscripts. The conference attracted a total of 270 abstracts, which culminated in 141 manuscripts.

SIMCOMVEC brought a technical feast via 115 SAE papers presented personally on-site by authors from India and abroad who are experts in their specific domain. There were 10 international papers out of these 115. Papers were presented in four parallel sessions over four days totaling to 32 technical sessions. The details of international papers are summarized below.

The 115 papers as a group gave a 360-degree view of the following 15 technical domains (there were 10 associated keynote presentations):

- Advanced engine technology (15 papers)
- Alternative fuels (7 papers)
- Emission controls (3 papers)
- Advances in HVAC systems (3 papers)
- Simulation and modeling (32 papers)
- Automotive electronics (4 papers)
- Hybrid and electric vehicles (11 papers)
- Onboard diagnostics (4 papers)
- NVH (11 papers)
- Safety and crashworthiness (8 papers)
- Advanced materials (3 papers)
- Advanced manufacturing (4 papers)
- Braking and steering systems (4 papers)
- Suspension systems (3 papers)
- Virtual prototyping and testing (3 papers)

In addition to the technical presentations, the delegates had a wonderful opportunity to listen to the lectures from

International Papers		
Topic	Number of papers	Organization(s)
Advanced engine technology	2	Achates Inc. (USA), Moscow St. Tech U. (Russia)
Safety and crashworthiness	2	Applus IDIADA (Spain), STA (Russia)
Simulation and modeling	1	Inst. of Control Sciences
Hybrid and electric vehicles	1	Applus IDIADA (Spain)
Advanced electronics	1	AVL (Austria)
NVH	1	LMS (Belgium)
Emission controls	1	Applus IDIADA (Spain)
Virtual prototyping and testing	1	China



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**Cutaway of the Mahindra XUV 500.**



**An Ashok Leyland engine.**



**Expo attendees had a keen eye for detail.**

eight plenary speakers who touched upon a wide gamut of topics such as:

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

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

### 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:

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

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; this is not the case in advanced countries. Marathe elaborated upon the homologation and vehicle-certification requirements and how his organization has been working closely with different vehicle segments toward achieving synergy. Sarangarajan exhorted the mobility engineering community to appreciate the “emotional aspect” an owner has toward his/her vehicle so that field issues are not viewed/solved from an engineering perspective only. Schulte shared his experiences of working in the USA and in the



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**American Axle was one of the exhibitors.**

India commercial vehicle market, highlighting the expectations of these markets and how the advanced technologies have to be rightly fitted to find their place in emerging markets. Chowdhury urged the mobility practitioners to believe in the capability of their own community and challenged the automotive industry executives to move toward zero physical prototypes through enhanced virtual prototype build and simulation. Bharadwaj connected with the audience through a description of the latest technologies in alternative powertrain and advanced telematics, and also explained how Indian engineers need to leverage frugal engineering to overcome the unique challenges faced by the industry.

### The finale

The SIMCOMVEC Conference was successfully concluded Dec. 7 with Dr. T. Ramasami participating as the Chief Guest and Dr. Pawan Goenka as the Guest of Honor. Additional dignitaries on the dais included Hillebrand, Schutt, Marathe, Bharadwaj, and Sampath.

In opening remarks at the closing ceremony, Marathe 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 discus-



**Srivats Ram, MD, Wheels India Ltd., delivered the curtain-raiser.**

sion, delegate registrations, and exposition." He urged the mobility community to continue to support SAEINDIA initiatives in organizing more such events.

In providing a summary of the four-day event, Sampath 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."

Said Goenka, Patron of SIMCOMVEC: "Though the 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 the commercial vehicle 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



**The Apollo Tyres booth.**

development activities within the country will give global recognition to India and the necessary sustainability to the industry."

Ramasami 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



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were handed over by the dignitaries on the dais.

Said Hillebrand: "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, Schutt 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 the SAE brand in India."

The Vote of Thanks was given by Sampath.



Participants of the high-profile panel discussion.



Launch of *Mobility Engineering* at the inaugural function.

## Professional development programs

On Dec. 2 and 3, two professional development programs (PDPs) had 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. A live demo was arranged by Wabco for the participants who traveled to its test track in Ambattur to see first-hand the advancement of safety technologies. Ford and Microsoft showcased their development of SYNC in a vehicle



**Dr. Pawan Goenka, Executive Director and President – AFS, M&M Ltd., addressing the audience at the valedictory function.**

while Mahindra gave the demo of Advanced Navigation System and Voice Activated Controls on its XUV500 W8 model. ■

**By Dr. Arunkumar Sampath, Chairman, Organizing Committee, SIMCOMVEC 2013.**