

insidetrack

the newsletter of the International Federation of Automotive Engineering Societies

Brazil gears-up SIMEA reflects growth in status





EVS 25 China attracts world-wide high-calibre interest







One hundred top technical executives from leading automotive companies, including FISITA Honorary Committee members, experts and policymakers from around the world came together to address the issue of global road traffic safety at the second FISITA World Automotive Summit.

FISITA organised the Summit on 4–5 November in Mainz, Germany in the run up to the United Nations Decade of Action on Road Safety which begins on 11 May 2011. A global plan for the Decade is being prepared and, among key measures, the plan will call for programmes to make roads and vehicles safer, to improve the behaviour of drivers and pedestrians, and to enhance emergency services.

The Decade of Action is being coordinated by the World Health Organisation (WHO), headquartered in Geneva. Dr. Margie Peden, Coordinator, Unintentional

Injuries Prevention unit, WHO and a specialist in road traffic injuries, told the Summit that the WHO estimates that 1.37m people are killed, and a further 20–50m injured, in road traffic accidents every year.

'90% of these fatalities occur in the low or middle income countries where only 50% of the world's vehicles are owned. Moreover, 70% of fatalities are vulnerable road users, ie those outside the vehicle'.

Above
NHTSA Administrator, David
Strickland, speaking at this year's
FISITA Summit in Mainz.

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Top

The panel discussion was a chance for participants to ask their questions on traffic safety issues

Above left

(Left to right) Prof. Bert Breuer (FISITA President 1996–8), Elke Breuer, Vicky Hancock, Dan Hancock (FISITA President 2004–6).

Above right

David Strickland (NHTSA), Margie Peden (WHO), Harman Singh Sidhu and Ajaib Sidhu (ArriveSafe India).

Ted Roberston, FISITA President.

Bottom
Christoph Huss, Organising
Committee Chairman.





While casualties in the mature automotive markets continue to fall as a result of safer vehicles, roads and enforcement, the numbers killed and injured in the developing countries are projected to increase at an alarming rate. The WHO now predicts that road traffic accidents will move from 9th to 5th place as a leading cause of death by 2030, unless urgent action is taken.

Prof. Dinesh Mohan, Volvo Chair in Biomechanics and Transportation Safety and Co-ordinator of the Transportation Research and Injury Prevention Programme at the Indian Institute of Technology, Delhi, described the road safety challenges in India as well as throughout the newly motorising markets. He stressed that material improvements in infrastructure were the number one priority for accident reduction, especially since the greatest gains were to be made in protecting pedestrians and riders of motor and pedal cycles.

'If we do things right, deaths do not have to rise along with incomes. However road design will need to change. The European or American experience is not good enough for countries which have quite different traffic and economic development conditions'

'The last 50 years were the era of "car safety". If we want to progress in the next 50 years, this will need to be the era of "road safety". Focusing on road design and road safety will have a far greater impact on fatalities than focusing on car design.'

Representing the European Union, Isabelle Kardacz, Head of the Commission's Road Safety Unit, told the Summit about Europe's 10 year plan to halve fatalities by 2020. She outlined the progress which had already been made using a legislative framework which covered infrastructure safety, vehicle safety and user safety.

'You have to get the basic legislative framework in place first. From this you can build and innovate, but the basics must be in place. This is the message we give to non-EU member states also.'

'Looking at the 27 member states of the EU today, we're coming from 75,000 fatalities in 1991 to around 35,000 in 2010'.

She added that in Europe, as in the developing markets, two wheelers were becoming a major priority since this is the only category where fatalities are actually increasing and the Commission would publish a strategy for two-wheelers in 2011. Overall she stressed the importance of shared responsibility between government, industry and road users.

'We must put PEOPLE at the heart of the road safety issue. Everybody is responsible for road safety. It is not something where you just ask the government to take care of it'.

This was a view shared by NHTSA Administrator, David Strickland, who told the Summit: 'Road safety is a public health problem, not a technology problem. It has to be looked at as a multi-disciplinary approach'.

Describing NHTSA's recent policy focus on the issue of driver distraction he explained: 'When it comes to distracted driving, this is a global problem. In the US

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Tony Bliss, Road Safety Specialist,
The World Bank.

we view it as an emerging threat which has to be handled aggressively through a combination of legislation and high-visibility campaigns.'

The US DoT had seen a rise in accidents attributed to driver distraction from 10% in 2005 to 16% in 2008. As a result of the legislative and campaigning initiatives taken, the rate was held at 16% in 2009. 'OEMs are increasingly competing on the basis of services provided to drivers behind the wheel. It's not going to go away, so we're working on providing guidance to the OEMs. We need to have a technology package as well as a behaviour package. Above all, we have to get the message across to drivers that the safest thing they can do when they're behind the wheel is just to concentrate on driving.'

Other expert speakers included Tony Bliss, Road Safety Specialist with the World Bank; Patrick Lepercq, Chairman of the Global Road Safety Partnership; Prof. Prof. Shouen Fang of Tongji University, a key advisor to the Chinese Government; Dr. Michael Strugala of Robert Bosch GmbH and Richard Harris, Director of ITS for Logica and a leading member of PIARC, the World Road Association.

Following a morning of informative keynote presentations and a lively panel discussion moderated by safety technology guru, Prof. Dr-Ing. Ulrich Seiffert, participants spent the afternoon in three parallel workshop sessions where priorities for further action were identified in the areas of:

- Specific strategies for developing countries
- Active & passive safety technology
- Human behaviour, including driver distraction

In closing the Summit, FISITA President Ted Robertson told delegates that FISITA has applied to become a participant organisation within the United Nations Road Safety Collaboration (UNRSC), the body charged with planning and delivering the Decade of Action.

'As the world body for automotive engineers, FISITA is determined to play a part in the planning process for the Decade of Action. Engineers can and should be proud of our record when it comes to safety. Innovations ranging from advanced crash structures, to ABS, ESC and other Advanced Driver Assistance Systems have saved thousands of lives and contributed to year-on-year fall in the number of fatalities throughout the mature markets.'

'But going forward, we need to think much more about how we can harness technology – not just to make the vehicle itself safer, but to change the behaviour of drivers and protect all road users. This year's World Automotive Summit has helped to give those of us in the vehicle engineering community a clearer picture of the challenges we face, especially in the low and middle income countries. Now we look forward to using the results of the workshop sessions as a basis from which to supply advice and expertise for the Decade of Action on behalf of automotive engineers'.

FISITA created the World Automotive Summit in 2009 to bring automotive leaders together with key players from politics, academia and influential NGOs to work on issues of critical technical and strategic importance to the future of the automobile. Participation is by invitation only and is limited to 100 attendees. The theme of the first event was how to reduce CO_2 emissions from road transportation.

Full details, including video and slide presentations, can be downloaded from the web site:



SIMEA conference reflects Brazil's growing status as a major power in the automotive world

"For SIMEA this year, we expanded the global connection with Brazil – a country that is becoming more important on the international automotive scene."

Ryuchiro Kamioka

President SIMEA Organising Committee Senior Executive Coordinator Toyota, Brazil Brazil is fast consolidating its position among the leading automotive manufacturers and exporters in the world. This was very much in evidence during September's SIMEA Congress, organised by FISITA's national member society, AEA, in Sao Paulo.

José Edison Parro, AEA President, opened the 18th annual conference which attracted more than 700 delegates from throughout Brazil as well as from the other MERCUSOR countries and beyond. He pointed out that the country, already the sixth largest vehicle producer in the world, was on course to become number five – perhaps by the end of 2010. FISITA Chief Executive, Ian Dickie was among the opening speakers, together with leading officials and executives from the Brazilian government, automakers and industry groups. The theme of the meeting was 'Challenges and Benefits in Harmonising Global Automotive Technology Regulation'.

Ryuchiro Kamioka, President of the SIMEA Organising Committee and Senior Executive Coordinator of Toyota in Brazil, said, 'For SIMEA this year, we expanded the global connection with Brazil because it is a country that is becoming every day more important on the international automotive scene. I hope we can exchange experiences and information in order to adopt similar techniques and solutions, thereby avoiding duplication of projects for models sold in Brazil and abroad.'

During a three day visit to the country, Ian Dickie & FISITA VP America, Dr. David Schutt, met with the leadership of AEA and SAE, Brazil, an affiliate of SAE International, to discuss further opportunities for collaboration with other societies in the FISITA network. Both Brazilian societies are addressing some major questions as the nation's domestic engineering capacity continues to gear up along with rising production. Most important is how to tackle the chronic shortage of engineering graduates to work in the many new technical centres and R&D facilities which are springing up throughout the country.

Another issue is how much emphasis Brazil's engineering profession should place on electrification technologies, given the country's unique position with regard to domestically produced bioethanol and its leadership in flexfuel vehicles.

FISITA Honorary Committee continues to grow

FISITA's elite group of industrial supporters continues to go from strength-to-strength with five new members joining in recent months, all from major Japanese companies.



HORIBA Ltd. Atsushi Horiba Chairman, President & CEO

HORIBA



Mitsui Chemicals, Inc. Toshikazu Tanaka, **President & CEO**





Mitsubishi Chemical Holdings Corp. Dr. Yoshimitsu Kobavashi President & CEO





Mitsubishi Motors Corp. Gavu Uesugi **Managing Director, Product Strategy & Development Group HQ**





Sumitomo Chemical Co. Ltd. Hiroshi Hirose President



SAE China sparks major interest with EVS 25



The Shenzhen EV Parade promoted new energy vehicles to the public.



SAE China was a co-organiser of the highly prestigious 25th World Electric Vehicle Symposium and Exposition (EVS25) held at the **Shenzhen Convention and Exhibition centre** from 4-9 November 2010.

The organisers received nearly one thousand academic papers from over 50 countries of which 557 made it through to the programme. These dealt with various aspects of EV development including vehicles and systems, rechargeable energy storage systems, fuel cells, driving systems and subsystems, infrastructure, energy and environment, demonstration and marketing problems, the political orientation of different countries, as well as global EV development strategies.

EVS25 attracted many government officials as well as representatives from the industry, academic and research circles related to the fields of energy-saving and new energy both in China and abroad. Some

countries with major investment in EV development, like the US, Canada, France, Germany, Netherlands, and Switzerland, organised state delegations to attend the Conference. High-level officials from the DOE of US, EU, IEA and other governments and organisations participated.

Two exhibit halls covering 45,000m² hosted over 350 companies displaying their products ranging from passenger cars and commercial vehicles, through battery and power control systems and even recharging infrastructure.

A highlight of this year's EVS was the Shenzhen EV Parade on 4 November in which an impressive fleet of new energy vehicles was presented directly to the public. Following the close of the congress in Shenzhen, some of these vehicles were transported to Hong Kong for a further Parade, Ride & Drive and Exhibition programme there.

Left to right: Prof. Peter White, lan Dickie, Dr. Valentin Ivanov, John Lowe, Pasi Perhoniemi, Dr. Daniela Hein, Emer Padden, Prof. John Feildhouse.

Education Committee meets in Dusseldorf

German FISITA society, VDI, were the kind hosts of a special strategic meeting of the FISITA Education Committee which took place at the society's headquarters in Dusseldorf on 8 December.

Led by VP Education, Dr. Daniela Hein, the full day meeting centred on a review of FISITA's Education Business plan. Future plans for the Student Microsite, Educator's Seminar, Travel Bursary Programme were discussed. Some exciting new initiatives to help societies and industry to recruit young people into automotive engineering and support them through their studies into professional life are planned.

FISITA Report on engineering education available



The report entitled *The Education of Automotive Engineers to meet the demands of the 21st Century* offers academia some fresh insights into the current and future needs of industry with regard to technology and wider competencies, helping them to ensure the relevance of their courses and the employability of their graduates.

Presentations from this year's seminar include:

- New demands on engineers of the automotive industry
- How companies and universities can work together to better prepare automotive engineers for careers in the industry
- Case study presentation: elements of an international and application orientated curriculum in automotive engineering
- Continuing education in partnership with higher education institutions
- The AutoUni: an institution of further education of the Volkswagen Group

The report and the seminar presentations are available to download free of charge from: www.fisita.com/educators

Russ Shields inducted into ITS Hall of Fame



During the closing ceremony of the 17th ITS World Congress on 29 October in Busan, Korea, T. Russell Shields, co-founder and chair of Ygomi LLC, was honoured with an ITS Hall of Fame Award for his lifelong contributions to the ITS industry.

A longstanding member of the FISITA Honorary Committee, Mr. Shields has been involved in intelligent transportation since the founding of Navteq, the map database company, in 1985.

He was a founding Officer and Director of ITS America, and was part of the group that conceived the ITS World Congress.

T. Russell Shields Chair of Ygomi LLC

Moscow State Technical University 'MAMI' celebrates 145 years of educating Russian engineers









The conference was part of the celebrations surrounding the 145th anniversary of MAMI – one of Russia's top technical universities in the field of automotive engineering and manufacturing technology. MAMI is a key institution within AAE, FISITA's member society in Russia.

The conference brought together over 1000 participants – Russian scholars and experts from other countries, leaders and representatives of universities, research organisations and automakers. It was held under the aegis of the Russian Ministry of Education and Science with the support of AAE and FISITA.

In a message of congratulations to the Rector of the University, FISITA President Ted Robertson, said: 'During its first one and a half centuries, MAMI has built up a well deserved reputation among the elite technical universities in Russia and also world-wide.

This reputation for excellence has been carefully maintained, despite the many challenges and resource constraints which have faced the entire education sector in post-USSR Russia'.

It was a MAMI student, Svyatoslav Cheranev, who won First Prize for the Outstanding Technical Paper at the FISITA 2010 Student Congress in Budapest.

During the event MAMI also held the first conference of Russian teams participating in the international design competitions: Formula SAE and Formula Student. Interest in the competitions is growing fast amongst Russian students and some 70 team members from Togliatti State University, Alekseev Nizhny Novgorod State Technical University, State Technical University MADI, Yaroslavl State Technical University as well as MAMI itself, took part in the conference.

Past President of SAE Australasia is new head of Toyota Technical Center



Mr Max Gillard

Toyota Technical Center Australia (TTC-AU) has appointed the Immediate Past President of SAE Australasia, Mr Max Gillard, to the role of President, effective 1 January 2011.

Mr Gillard's appointment is a milestone for Toyota globally, as he will become the first local (non-Japanese) President of a Toyota Technical Center anywhere in the world. Mr Gillard has been Vice President and Executive Director of TTC-AU since

2004. Before joining TTC-AU, Mr Gillard spent 26 years with Toyota Motor Corporation Australia (TMCA). During this time he served in a variety of senior management positions in Engineering Design, Product Planning and Purchasing, before joining TMCA's Board of Directors in 2004.

Located in Notting Hill, Melbourne, TTC-AU is one of five Toyota Technical Centers around the world and the only one in the southern hemisphere.

Internal & External Relations Committee members meet at FISITA HQ



Left to right: Günter Hohl, Murli Iyer, Emer Padden, Ian Dickie, Sophie Hill, Helen Lycett, Kelly Williams Chairman of the Internal & External Relations
Committee, Murli Iyer, visited FISITA HQ in December
along with with co-Chair, Dr. Ludwig Vollrath and VP
Europe, Brig. Prof. Günter Hohl to meet with staff and
plan the committee's work for the year ahead and
review the FISITA Internal Relations Policy. Priorities
for 2011 include the launch of the new on-line
members area and re-launch of the FISITA
Handbook.

FISITA Online Bookstore

Does your society publish conference and journal papers in English?



Would you like to make them available to engineers world-wide and generate income for your society at the same time?

FISITA's on-line bookstore sells thousands of individual technical paper downloads as well as complete proceedings, books technical dictionaries and CD ROMs.

To find out more, contact: **Kelly Williams**Membership Officer

k.williams@fisita.com

News in brief

France

SIA have announced Emmanuel Lafaury as the new President of the society's Trophy SIA competition. Trophy SIA is a contest open to university students, who compete to design and construct an innovative vehicle with a focus on the use of new energy sources. The next contest will take place from 27–28 May, 2011. Mr. Lafaury is a manager responsible for new automobile concepts within PSA Peugeot Citroen.

Japan

Osaka University has won the Formula SAE of Japan competition for the first time. The team were overall champions of this year's event which took place at the ECOPA circuit from 7–11 September and also walked away with the FISITA Award for Engineering Excellence.

United Kingdom

IMechE members' magazine, Professional Engineering, has been re-launched following the transfer of the Institution's magazine publishing business to private publishing house, Caspian Media, earlier this year. The re-vamped title comes with a new look and promises more articles on the achievements of members within the wider engineering world.

www.profeng.com

United States

SAE International has elected Dr. Richard E. Kleine as 2011 SAE International President. Kleine is Vice President, Quality and Business Enterprise for Cummins Inc. His one-year term will begin in January 2011.

Nominate a colleague for outstanding service to FISITA



Do you know someone who works hard for FISITA and deserves a big thank you from our association?

If so, why not nominate them for a 2011 FISITA Recognition of Service Award?

The purpose of the award is to:

- recognise individuals who have made an outstanding contribution towards FISITA's work and the advancement of its goals.
- increase motivation and sense of common purpose among FISITA activists.

Nominations can be made by any member of a FISITA Society and the deadline for the receipt of your nominations is 1 February 2011.

Awards are made by the Executive Board based on the recommendations of the Internal & External Relations Committee. The 2011 awards will be presented during the Council dinner which will take place in Valencia in June next year.

For more information contact:

Kelly Williams

Membership Officer k.williams@fisita.com

APAC 16 Call for Papers

There is still time to be a part of the programme for next year's **APAC 16 congress on** automotive engineering taking place in Chennai, India from 6-8 October 2011.

The theme is 'Sustainable Technologies for Safe and Smart Mobility' and host society, SAE India, is seeking papers on the following topics:

- Engine technologies
- Clean fuels and sustainable proportion
- Fuel economy and CO₂
- Fuel injection systems
- Thermal management systems
- Engine lubrication
- Reliability and durability
- Safety
- Commercial vehicle technologies
- Off-highway vehicles
- 2- and 3- Wheeler technologies
- Hybrid and electric vehicles
- Automotive Infotronics
- Power train and aggregate management systems
- Driver assist systems
- Communication networks and Telematics
- Safety electronics
- Engineer processes, tools and Product Lifecycle Management

- Simulation, virtual testing, modelling
- NVH, comfort and ergonomics
- Vehicle architecture
- Advanced materials
- Manufacturing technologies
- Policy and regulation
- Energy storage, distribution and infrastructure
- Collaborative innovation

A FISITA Council Meeting will be organised alongside APAC 16.

Abstracts are required by 31 January 2011.

To submit an abstract log on to www.apac16.org



Change of date for FISITA 2012 World Congress in Beijing

SAE China have announced a change of dates for the FISITA **2012 World Automotive** Congress in Beijing.



The congress will no longer be held from 15-19 October as previously advertised. Instead it will now take place from 27-30 November 2012.

The venue (China National Convention Centre) remains unchanged.



Past President Dr. Jack W. Schmidt



Dr. Jack W. Schmidt FISITA President 1994–96

It is with great sadness that we report the death of Dr. Jack W. Schmidt, FISITA President 1994–96, who passed away on Sunday, 31 October after a long fight with cancer.

Jack was instrumental in building today's FISITA. He was one of the key architects of FISITA's first strategic plan, along with the creation of the Honorary Committee and the move to a permanent staff. He saw, before many others did, that our industry would globalise. As a true

internationalist, he chose to devote his considerable talent and energy to supporting FISITA as the neutral association to support engineers and industry through that globalisation.

Throughout a long and distinguished career with General Motors, Jack was a tireless supporter of the automotive engineering profession. He was active in the leadership of SAE International for many years and served as SAE President in 1992, in addition to his time devoted to FISITA.

Everyone who was fortunate enough to know him will remember an extremely effective, inclusive leader as well as a very kind, courteous and thoroughly decent man.

The FISITA Executive Board began its recent meeting with a minute of silence in memory of Jack who will be missed not only by his wife Marilyn, family and close friends, but also by his countless FISITA friends throughout the world.

Competition



In this issue of insidetrack, we're offering you the chance to win a stylish Make Roads Safe t shirt, identical to those worn by celebrities who are part of the global Make Roads Safe campaign such as movie star Michelle Yeoh and racing drivers Michael Schumacher and Lewis Hamilton.

All you have to do is answer the following question: Which Swedish engineer is credited with the invention of the three-point lap and shoulder seatbelt?

Send your answer to: insidetrack@fisita.com

Merry Christmas and best wishes for a successful 2011





insidetrack

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