



insidetrack

the newsletter of the International Federation of Automotive Engineering Societies

SAE India Congress

International Mobility Engineering



Barcelona Motor Show

Award winners announced



SATL 75 years

Anniversary celebrations



Racing to Green Mobility

SAE International showed the world they can put on a good show despite the current economic turmoil, with a successful World Congress 2009 from 20-23 April in Detroit, USA.

Highlights included an opening plenary which featured two of the most important figures in US politics in terms of their impact on the auto industry.

Governor Jennifer Granholm of Michigan and Governor Arnold Schwarzenegger of California

both shared their visions for the future of the US industry and Detroit in particular, highlighting the important role that green technology will play in the future.

Gov. Schwarzenegger's appearance added a buzz to the opening morning. He used the



opportunity to affirm his support for a stable federal energy policy and a greater use of renewable energy sources for transportation. He also showed sympathy for US automakers and the industry – assuring the audience that 'Detroit will be back'.

Top: California Governor Arnold Schwarzenegger was interviewed by CNBC auto reporter Phil LeBeau.

Above: Michigan Governor Jennifer Granholm and Arnold Schwarzenegger address the SAE World Congress 2009.

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SAE World Congress 2009 – Racing to Green Mobility

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Gov. Granholm spoke at length on the need to build on Michigan's engineering and technology base, and the importance of attracting new Electric Vehicle technology investment to the region, before taking questions from the audience.

The theme of SAE 2009, 'Racing to Green Mobility', aimed to provide direction and purpose to the current industry-wide efforts to reduce emissions.

Many of the panel discussions focussed on emissions, the environment, and the adaptation of business models to make them 'green'.

Almost 16,000 people registered for the four-day congress where more than 1,300 technical papers were presented. The focus was on seven key areas of technology: electronics, emissions/environment,

integrated design and manufacturing, management, materials, propulsion/powertrain and safety and testing.

The Annual Banquet, a traditional Congress highlight, was no less impressive than in past years and the keynote address was given by Takeo Fukui, President and Chief Executive Officer of the congress host company, Honda Motor Company. This year also saw the launch of SAE's new Virtual Conference Centre, which posts video packages from key technical sessions and panel discussions online for those unable to attend the meeting.

SAE is planning a new format for its 2010 World Congress, which will be hosted by Ford. Next year's event will last for 3 days instead of 4, and there will be a limit of 100 companies exhibiting, with a strict focus on innovation and new technologies.



Past FISITA President receives Blue Ribbon Medal of Honor

Past FISITA President, Dr. Akihiko Saito, of Toyota Motor Corporation, has been awarded the Medal of Honor with Blue Ribbon – one of the highest honours bestowed by the nation of Japan.

The Medal of Honour recognises individuals who have made a significant contribution to public welfare and education. Dr. Saito received his medal in a special ceremony held in Tokyo on 3 May.

Dr. Saito has been devoted to R&D in automotive technology for many years, and was recognised for his participation in the technical development of environmental-friendly, clean and fuel-efficient engines and hybrid systems, providing automobiles that meet the needs of society.

FISITA breaks new ground with first World Automotive Summit on CO₂

“Alongside the current financial crisis, the greatest technical challenge we face is still to find effective and affordable ways to reduce automotive CO₂.”

Christoph Huss
President, FISITA

FISITA has announced the programme for an ambitious new event aimed at bringing together the technical leaders of the global industry to identify common approaches to reducing CO₂ emissions from road transportation.

An elite group of 100 senior executives, academics, policy experts and government figures, is expected to gather from 15-16 July at a retreat in Falkenstein, near Frankfurt, for the first FISITA World Automotive Summit.

A mix of provocative presentations and workshop sessions will look into the potential gains from advances in Fuels and Fuel Economy, Electrification and Traffic Management.

FISITA has assembled some of the world's top experts from industry, research and public policy to kick-start debate on what are the most efficient

routes for the auto industry to cut emissions, and what conditions engineers need from government and society to be successful in this vital mission.

FISITA President, Christoph Huss, said: ‘Alongside the current financial crisis, the greatest technical challenge we face is still to find effective and affordable ways to reduce automotive CO₂.’

‘Our summit will take place ahead of December's United Nations Framework Convention on Climate Change (COP 15) in Copenhagen, when the nations of the world will seek agreement on future global initiatives to tackle CO₂ reduction. We hope that by assembling the key technical leaders from our industry prior to this world event, we can contribute to the debate as a “pathfinder”, helping to identify our shared priorities and bringing focus to the work being done.’

FISITA World Automotive Summit speakers

Speakers at the FISITA Summit include some of the best known technology and policy experts in the world (below, left to right):



Nobuo Tanaka
Executive Director
International Energy Agency

Dr. Lee Schipper
Senior Research Engineer
Precourt Energy Efficiency Center
Stanford University

Dr. Alan Lloyd
President
International Council on
Clean Transportation

Prof. Ouyang Minggao
Chief Scientist, Chinese National
Energy-efficient and New Energy
Vehicle Program
Tsinghua University

Fotis Karamitsos
Director, DG Energy and Transport
European Commission

T. Russell Shields
Chair
Ygomi LLC

Prof. James Woudhuysen
Author, *Energise! A Future for
Energy Innovation*



More information:
www.fisita-summit.com

Starting with Lego bricks ... finishing as an engineer!

Germany's VDI has launched a new initiative that aims to introduce children to technical and natural science.

The VDIni-Club will encourage children between 4 and 11 years old to learn more about technical phenomena through a unique combination of appropriate

entertainment and activities, such as an internet page, a club newspaper, and various events to be held throughout Germany.

VDI hopes that the VDIni-Club will strengthen bonds between generations and unite them in inspiring young people to follow engineering. An advisory

committee of teachers and experts will meet regularly in order to monitor the suitability of the activities.

More information
www.vdini-club.de



JetToy Olympics



More than 500 students from 29 schools across three countries participated in the third annual A World In Motion (AWIM) JetToy Olympics at the SAE 2009 World Congress on April 22 – almost double last year's participation.

The students made up 129 design teams from south-eastern Michigan; Washington, DC; and Pune, India, and competed in categories of distance, weight carrying, time, and accuracy. The balloon-powered cars help to demonstrate core scientific concepts to students such as jet propulsion, friction, air resistance, and design.

Above: **Glenn Sloan, an A World In Motion volunteer from General Motors Corp., demonstrates the JetToy for students.**

FISITA World Congress 2010 – Call for Papers



There are just four weeks left to submit abstracts for the FISITA 2010 World Automotive Congress! FISITA 2010 will take place from 30 May–4 June next year in Budapest, Hungary, with the theme *Automobiles and Sustainability*.

Authors wishing to be part of the programme are invited to submit their abstracts online by 30 June 2009, at www.fisita2010.com

News in brief

Australia

SAE-Australasia, in association with the Department of Mechanical Engineering at the University of Melbourne will present a 3-day professional development short course on Road Transport Engine Emissions, from 15–17 July, at the University of Melbourne. The course is aimed at engineers, managers, commentators and regulators and will review spark ignition, diesel engine combustion and the origin of exhaust emissions.

Italy

On 17 June, ATA will organise their 3rd *International Hybrid, electric and fuel-cell propulsion systems* conference at the Centro Congressi Torino Incontra in Torino, Italy. The Conference will address the issues surrounding the development of alternative technologies, electric energy management concepts and the establishment of an eco-sustainable mobility system.

United Kingdom

The Institution of Mechanical Engineers will host a Class 1A event as part of its Formula Student 2009 competition at Silverstone this July. Students will be encouraged to use alternative fuels, such as hydrogen and biofuels, to power racing cars. Teams will compete from Oxford Brookes, Imperial College London, Hertfordshire University, University of Central Lancashire and educational establishments in Zurich, Switzerland, Moscow, Madrid and Barcelona.



SATL 75th anniversary celebrations



Right: SATL President Mr. Keijo Mäenpää gives a speech at the Annual Meeting.

Far right: Executive Director Pasi Perhoniemi presents FISITA President Christoph Huss with a gift.

FISITA President, Christoph Huss, was among the guests of honour in March this year when Finnish society, SATL, celebrated its 75th anniversary in Lahti, Finland.

The society's official birthday was February 24th, when a small reception was held for friends, family and customers at Finlandia Hall, Helsinki. But from 12–15 March, SATL's annual gathering, organised by the local Lahti society, became the focus for a special celebration involving members of the local SATL associations throughout Finland, and guests from abroad.

The celebration began with a professional course on automotive assembly on Thursday 12 March, organised with the professional school of Lahti. The aim of the course was to provide world skills

competition training, and to motivate students. This was followed on Friday by a short course on sustainable vehicle engineering, including theory presentation and hands-on practise with three test points. In the evening there was a reception for invited partners following a concert in Sibelius House in Lahti, given by Jorma Kääriäinen and the Riku Niemi orchestra.

On Saturday the society's annual meeting took place, with a sponsor presentation on Recycling technology and a special presentation by FISITA President, Christoph Huss. Finally, following the traditional afternoon sauna, all participants gathered for a celebration dinner with performances and recognition of active members of the organizing Lahti's society.

FISITA Award presented at Formula SAE



David Schutt (centre), Executive VP and Chief Operating Officer of SAE International, presents the FISITA award.

Pennsylvania State University were the winners of the FISITA Award for Engineering Excellence at this year's Formula SAE Competition held in Michigan, USA from 13–16 May.

The FISITA award is presented to the team which achieves the highest combined score in the static events (Cost, Presentation, Design, Acceleration, Skid Pad, Autocross and Endurance-Economy). This season's Penn State car featured numerous design improvements including the use of a Honda CRF450X engine, an electronic shifting system, a double barrel throttle body and a redesigned wheel package. Overall emphasis was placed on constructing a car that was lightweight and simple.

The team received their award from SAE Chief Executive Officer and FISITA Board Member, Dr. David Schutt.

SAE India International Congress and Exposition 2009

SAE India has announced the next edition of its International Mobility Engineering Congress and Exposition, which will take place from 13–15 December 2009, at the Chennai Trade Centre.

The theme of the Congress is 'Innovative Technologies for Sustainable Mobility'. Topics explored within this theme will include: innovative process-product technologies; renewable energy; hybrid technology; fossil fuels; fuel efficiency and preparing the mobility-engineering workforce to develop, manage and harness innovative technologies.

The Congress is a showcase for Indian manufacturers, component suppliers, researchers and academia, and also provides professional and economic opportunities for India's automotive engineers. It will comprise a Technical Program, Exposition, Technology Theatre, Design Competition, Student Paper Competition and

'Toptech' Training Programs. There will be 16 technical sessions in total, with four technical papers per session and a keynote lecture from an internationally renowned expert on each topic.

Two plenary sessions have been planned, with addresses from internationally recognised speakers. Two panel discussions have also been envisaged on 14 and 15 December as concluding sessions; one will focus on current issues, the other on future challenges. These panel discussions will feature a mix of industry experts, academia and policy making bodies.

All members of the mobility community are invited to attend the conference and exposition - booking and allotments will be on a first come first served basis.

More information
www.saeindiamobilitycongress.org



Daniel M. Hancock,
GM Powertrain, Vice President
of Global Engineering

Dan Hancock receives SAE Medal of Honor

During the Awards Ceremony at the SAE World Congress 2009, Dan Hancock, GM Powertrain Vice President of Global Engineering and Past FISITA President, was presented with the SAE International Medal of Honor.

The Medal was established in 1986 and is the most prestigious award given by SAE International. It recognises an SAE member for his or her unique contributions to the work and success of the society.

Hancock, who served as FISITA President from 2004 to 2006, was recognised for his service to SAE, including his role as Chair of the SAE Detroit Section, a term served on the Board of Directors, and his ten-year tenure as Chairman of the SAE Foundation Board of Trustees. He was especially recognised for his role in the SAE Foundation's Capital Campaign, which succeeded in raising \$26.5 million in pledges and contributions.



Europe in the Second Century of Auto-Mobility

The 12th European Automotive Congress will take place from 29 June–1 July in Bratislava, Slovakia. This biennial Congress provides automotive experts with the opportunity to present their latest work and to exchange information in the field of automotive and related industries.

Jan Lesinsky, President of the Slovak Society of Automotive Engineers (SAITS) and Chairman of the EAEC Automotive, commented:

'In recent years, the countries of Central Europe have become an important area for the concentration and evolution of transportation techniques, manufacture of components, parts, aggregates, and modules. The automotive industry, and specifically suppliers market, is one of the fastest developing sectors in Central Europe.'

'This decade we expect great changes in the automotive world in the utilisation of information technology and almost revolutionary changes in materials and minimisation of material use and energy consumption. The automobile is a part of peoples' living and working environments, and the greatest changes will be linked with production systems and the roles of people.'

The Congress will consist of 120 presentations in three groups:

- Topic P: Powertrain Efficiency
- Topic V: Vehicles for the Next Decade
- Topic T: Production and Transportation Systems

Panel Sessions will cover:

- Powertrain Performance
- Engine Development
- New Materials
- Hybrids
- Vehicle Systems
- Safety
- Recycling
- Regulation

Speakers include internationally recognised academics from institutions across Europe and the world, as well as representatives from global automotive organisations.

Participants will also see finished products in the exhibition area and have the chance to attend the workshop, Autoday 2009, where top managers from the region will meet with members of the FISITA Council.

The Congress programme is now available online: www.eaec2009.com/homepage/Congress_Programme/Preliminary_programme



Matti Juhala,
Vice President Education, FISITA

FISITA Educator's Seminar

Also during this year's EAEC Congress, FISITA will organise a new Educator's Seminar which will provide engineering educators with the opportunity to gain insight into the current and future needs of the automotive industry - helping them to ensure the relevance of their courses and the employability of their graduates.

The half day session will be a chance for educators and industry employers to make connections and discuss innovation in automotive engineering education. The Seminar will be chaired by FISITA Vice

President of Education, Matti Juhala, and speakers will include presentations from a representative from the European Commission as well as from innovative higher education institutions and industry.

EAEC delegates may attend the seminar free of charge.

More information
www.fisita.com/education/educators



STA – 7th Barcelona International Motor Show Awards

During the 35th Barcelona Motor Show, Spanish FISITA member society, STA, organised the 7th edition of its Barcelona International Motor Show Awards for the Best Technological Innovations in the Automotive sector.

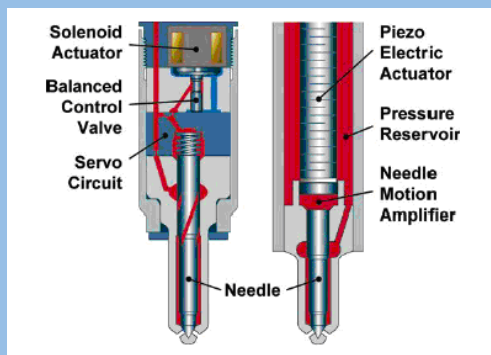
The awards are among the most prestigious for businesses, institutions and professionals in the sector, and aim to stimulate the creation of innovative projects as well as recognising existing achievement.

This year, for the first time, participants were asked to present their projects in three different categories:

- Complete Vehicle
- Systems and Components
- Technologies, Processes and Materials

The awards ceremony took place on Thursday 7 May, with the prizes being presented by top Spanish automotive journalist, Josep Lluís Merlos.

Best Technological Innovations in the Automotive sector



Systems and Components

Winner
DELPHI DIESEL SYSTEMS

Project
Delphi's new direct acting common rail injection system



Complete Vehicle

Winner
Rücker Lypsa

Project
Hychain Mini-Trans: Scooter prototype



Technology, Processes and Materials

Winner
FICOSA International, S.A.

Project
New Generation of Invisible Embedded Antennas in Composite Car Roofs

ATA International Conference: Architectures for Eco-vehicles – weight reduction, alternative fuels, and propulsions

Italian society ATA will host their 11th 'Architectures for Eco-vehicles' International Conference in Florence this year, from 24–25 September.

The event will examine the various factors that have contributed to the transition phase the car is experiencing, such as the emergence of new energy resources to replace traditional fuels; the environment, pollution and the legislation that exists to reduce it; the behavioural shift of consumers in the way they use their cars, and the resultant traffic congestion.

During the technical sessions of the conference discussions will focus on how the automotive world

is moving to become more 'eco', from an economical and environmental point of view; the increasing trends towards weight reduction; and how materials and architectures are adapted, modified and designed in relation to the adoption of alternative fuels and electric powertrain.

The relationship between vehicle structures and evolution of batteries, hybrid technologies and pure electric drive will also be examined.

5 minutes with Amelie Gong



Name: Amelie Gong

Role: Vice Director of International Affairs at SAE-China

Location: FISITA Headquarters, London, on a six-month secondment

Education

1993–1997 Beijing Jiaotong University, Bachelor of Civil Engineering
2000–2004 Tsinghua University, Master of Business Administration

Work Experience

1997–2006 China Academy of Railway Science
2006– present Society of Automotive Engineers of China (SAE-China)

What is your role at SAE China?

I work as Vice Director in the Department of International Affairs at SAE-China. The main role of the department is to organise international forums, conferences and technical exchanges between engineers from home and abroad.

What will you be doing during your time at FISITA?

My duties here include supporting the planning and organisation of the FISITA 2010 World Automotive Congress and assisting staff and the FISITA Technical Committee in the planning, analysis and execution of projects within the TC Business Plan. I'm also providing advice and guidance to FISITA staff on how to increase the appeal and uptake of FISITA programs within the Chinese auto industry and engineering community.

I guess supporting the FISITA 2010 Congress will be the most important one. But to begin with, I'm just trying to familiarise myself with the new environment.

What made you decide to spend six months with FISITA?

The previous FISITA congresses have been very successful, and the FISITA 2012 Congress will be held in Beijing. It's good for SAE-China to familiarise ourselves with the organising process, to gain experience and apply this to FISITA 2012. It's also a good opportunity for me to experience a different culture and improve my English.

What do you like most about living and working in the UK?

I come from China, which is an ancient oriental country. Although China is getting more and more modern in these days, especially in big cities like Beijing and Shanghai, there are still a lot of differences, in food, people, culture and architecture almost everywhere. So it's good to get to know more about a different country and its culture.

What do you like least?

I'm not sure. Maybe the weather – I have to take an umbrella every day.

What do you miss most about China?

Food, my family and my friends. The good side is I can learn to cook western food and make new friends here.

FISITA President, Christoph Huss and the NSU Ro 80



I ♥ MY CAR

“The design of the standard car is truly outstanding – it was way ahead of its competitors at the time.”



Tell us about your car

She is a metallic blue NSU Ro 80. NSU was a German manufacturer that was very famous in the 50's and 60's for producing smaller cars, such as the 'Prinz' – a very powerful race car.

Ro stands for Rotary Engine, and rumour has it that the '80' stood for 800kg, which was supposed to be the weight of the car. It has also been said that the '80' stood for 8000 Deutsche Mark, as this was the intended price.

These rumours aren't confirmed though ...

Where did you find her?

We bought the car for my father in 1977, as a replacement for his day-to-day car. It was less than one-year old, with under 14,000km on the clock.

Is she rare?

Yes. Only around 37,000 were made between 1967 and 1976, and probably fewer than 10% of them are still on the roads.

What do you love most about her?

The whole vehicle concept. The NSU Ro 80 is famous for its rotary engine, which has the advantage of having a low number of vibrations whilst driving. Aside from that, I enjoy the front-wheel drive, the four disc brake design, the small pillars, big windows and huge trunk.

The design of the standard car is truly outstanding – it was way ahead of its competitors at the time.

What annoys you most about her?

Unfortunately, the fuel consumption is high, and the power output is low compared to other cars. It also gives out a high level of exhaust emissions, which is not so good.

Has anything amusing happened to you with the car?

I started my career with BMW in 1983, and at that time I was driving to work in the NSU Ro 80 every day. During my interview, a colleague mentioned a scheme that BMW had, where young engineers with the company could buy BMWs with a rebate. When I told him what car I drove, he didn't believe they really existed!

I was still living in Cologne when I got the job with BMW, and had to move to Munich to start my job. I packed the car with all of my belongings, and drove it all the way from Cologne to Munich, which is around 600km.

All I can say is – that car is fast!

If you are in love with a car, please tell us about it:
insidetrack@fisita.com

Competition

Oriol Gallemi, from STA Spain (right), was the winner of last issue's competition, and is pictured here with his Minichamps Karmann Ghia Convertible. Oriol correctly named three films that the Karmann Ghia has appeared in; Kill Bill (2004), Pretty in Pink (1986) and Octopussy (1983).

This issue, we're offering you the chance to win a some stylish racing apparel kindly donated by ATA, Italy: a hat, t-shirt and polo shirt featuring the Formula ATA logo, as modelled here by new FISITA Technical Officer, Zoltan Farkas, below.

All you have to is answer the following question: Where did the first ever Italian Grand Prix take place?

Email your answer to insidetrack@fisita.com

Good luck!



Contact Update

Ravi Senji, previously COO and Head of Operations at Alpha Educom, is Deputy Manager at SAE India.

Jon Hilton, Partner in Flybrid Systems and former Technical Director of the Renault F1 Team's Engine Division, is the 2009/10 Chairman of the IMechE Automobile Division.

Pierre Gosset, Group Quality Director at PSA Peugeot Citroën, is the new President of SIA.

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FISITA diary

29 June–1 July 2009	Executive Board, Committees and Council EAEC Bratislava, Slovak Republic
15–16 July 2009	FISITA World Automotive Summit Frankfurt
26–28 October 2009	Executive Board, Committees and Council APAC Hanoi, Vietnam
12–13 April 2010	Executive Board SAE Congress Detroit



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