



*Automobiles and Sustainable Mobility*



**FISITA**

**2010**

**World Automotive Congress**

**30 May – 4 June, Budapest, Hungary**

# First Announcement & Call for Papers



**[www.fisita2010.com](http://www.fisita2010.com)**

## Introduction

For sixty years the biennial FISITA World Automotive Congress has provided the platform for the world's engineers and specialists to come together to exchange ideas and advance the state-of-the-art in automotive technology.



**Christoph Huss**

FISITA President 2008-2010

Throughout this time, the Congress has tackled each of the important issues facing engineers in the design, development, manufacture and use of automobiles. Today the global automotive industry is confronted with the greatest series of challenges in its history. Engineers are being asked to dramatically reduce the environmental impact of vehicles, and improve safety, without sacrificing any of the comfort, features or driving pleasure which today's customers take for granted. Not only that, but we must do it quickly and in ways which are practical and affordable enough to be integrated into the millions of new vehicles which will soon be on the roads of the fast growing markets like China, India, Russia and Brazil. Hence our theme for FISITA 2010 of Automobiles and Sustainable Mobility.

The technical solutions needed to square this circle, in terms of alternative power sources, new materials, approaches to testing & development, advanced electronics and a connected approach to personal mobility, will have to be more radical than anything in the evolution of the automobile so far. Success will also depend upon greater cooperation among the world's engineers and automotive companies.



**Andor Paizer**

FISITA 2010 Congress Chairman

In 2010 the FISITA Congress will come to Hungary for the first time since 1978. Hungary is a country which can boast an excellent geographical location at the heart of Europe, as well as an outstanding automotive heritage. Great Hungarian innovators include János Csonka (inventor of the carburettor), József Galamb (organiser of mass production of the Ford Model-T); Béla Barényi (conceived idea of active vehicle safety and active safety codes) and Gyula Cser (invented the combined engine-charger system).

Hungary's vehicle-manufacturing base is built on strong historical foundations and on the longstanding expertise developed by manufacturers such as Ikarus, Csepel Autó and Rába. Today, the key players in the automotive sector include Audi, General Motors, Suzuki, as well as the traditional Hungarian manufacturer Rába and an expanding global supply base comprising more than 300 companies.

In 2007 Hungary produced more than 291,000 passenger cars and 2,200 commercial vehicles, an increase of 30% on the previous year's figures. The country is a growing automotive power within Europe and there are outstanding opportunities for joint production with companies in the region, and also many new opportunities in technology and know-how transfer.

Join us in the beautiful city of Budapest for the 33rd FISITA World Automotive Congress and help set the future agenda for Automobiles and Sustainable Mobility.

## Main Themes of the Congress

The following themes are suggested and the authors are invited to send papers accordingly.



### A Environmentally friendly vehicles

- A1** IC engines: goals and developments
- A2** Tools for emission reduction, zero emission in the future
- A3** Alternative fuels and related systems (e.g. electric, hybrid, fuel cell, NCG, LCG, bio-fuel)
- A4** Sources of noise, reduction of vehicle noise



### B Vehicle design and development

- B1** Styling, aerodynamics
- B2** New concepts, materials and tools in body design
- B3** Vehicle families based on platform-sharing, chassis design
- B4** Development of main parts, components and vehicle systems
- B5** Design for manufacturing, maintenance and repair
- B6** Development of vans and special vehicles (e.g. off road, mobile machinery)
- B7** Micro cars and low cost vehicles for emerging markets



### C Test, simulation and calculation methods of vehicles and components

- C1** Advanced engineering technologies and tools
- C2** Methods of strength and service life estimation
- C3** Vehicle performance tests and simulation
- C4** Testing and simulation of vehicle and component dynamics
- C5** Tools and methods for whole vehicle systems engineering



### D Safety on roads

- D1** Accident statistics, analysis and reconstruction techniques
- D2** Injury mechanisms, injury reduction and avoidance
- D3** Active safety issues (e.g. braking systems, steering, suspension, stability, lighting)
- D4** Passive safety issues (e.g. compatibility of vehicles, energy absorption, survival space concept, biological-load limitations, passenger retention systems)
- D5** Protection of vulnerable road users (pedestrian, bicycle)
- D6** Road infrastructure and vehicle safety



### E Intelligent systems in road traffic

- E1** Intelligent vehicle systems (e.g. driver-vehicle interaction, control of vehicles, crash avoidance)
- E2** Intelligent traffic systems (e.g. GPS based systems, driver's information, lane-keeping systems, control of traffic lights, vehicle to vehicle communication)
- E3** Intelligent Transportation Systems (traffic and vehicle fleet management)
- E4** Connectivity of intelligent systems, security questions





## F Buses, trucks and heavy vehicles\*

- F1** Development, new design, new vehicles
- F2** New propulsion system arrangements
- F3** Passenger comfort and safety
- F4** Protection of drivers and crew
- F5** Under-run protection
- F6** Fires in heavy vehicles, fire protection
- F7** Evacuation of buses, emergency exits
- F8** Performance based design of large special-vehicles for road use

\*Theme **F** incorporates the 41st Meeting of Bus and Coach Experts organised annually by the Hungarian Society GTE.



## G Vehicle standards, regulations, legislation

- G1** Globalization of vehicle standards and regulations
- G2** New directions in international regulations
- G3** General questions of vehicle and component approvals

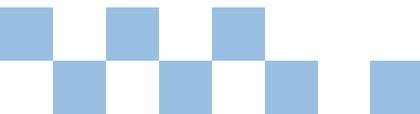


## H Efficient production and operation of vehicles and components

- H1** Performance/cost material selection, new materials
- H2** Modularisation in design for economical production
- H3** Life cycle concept in production, service and recycling
- H4** Supplying chain and logistics
- H5** Efficient new technologies in production
- H6** Customer based sales and services

## Important Dates

|  |                           |
|--|---------------------------|
| Deadline for abstract submission                             | <b>30 June 2009</b>       |
| Notification to authors                                      | <b>30 September 2009</b>  |
| Publication of the Preliminary Programme & registration form | <b>31 October 2009</b>    |
| Deadline for submission of final paper                       | <b>15 March 2010</b>      |
| FISITA 2010  | <b>30 May–4 June 2010</b> |



## Submission of Abstracts

Abstracts must be submitted in English via the Congress web site

[www.fisita2010.com](http://www.fisita2010.com)

and should contain the following:

- Title of the paper
- Contact information for author and co-authors (company, position, email, fax, phone, mailing address)
- 3-5 key words
- Subject groups the paper belongs to (e.g. C2, F1)
- Abstract (clear description of the subject, main results and conclusions reached) min. 300, max. 500 words plus any supporting diagrams or illustrations, but the complete document shall be presented on one page.

Papers should be original and should not have been presented elsewhere. Papers must be written and presented in English. Oral presentations are allocated 20 minutes each, plus discussion.

Abstracts not meeting the requirements above will be refused.

The Scientific and Technical Committee (STC) will decide whether to accept a paper on the basis of the abstract. Abstracts should clearly set out the main scientific, technical, economic and / or practical points to be addressed, paying particular attention to those aspects of the work which are new, innovative and unique.

The STC will also decide whether to accept the paper for oral or poster presentation, taking into consideration the number of abstracts received in each subject group and inform authors accordingly. Only papers presented by their authors at the congress will be published in the Book of Abstracts and Congress Proceedings.



## Congress Venue

Budapest, the capital of Hungary, is an economic, financial and cultural centre with two million inhabitants. The city which is beautifully situated on both sides of the Danube river has a history dating back over 2000 years. A visit to Budapest affords a real journey through time. During a short stroll through the city you can experience a variety of architectural styles from Roman monuments to ultra-modern confections of glass, metal and halogen. Naturally, the history and the beauty of the city is not all. The people living here created the soul of the city and have contributed to its vitality throughout the centuries.

The venue, University Congress Centre, is equipped with a complete range of conference facilities and is easily reached by public transport. It is situated in a pleasant and peaceful park on the Danube embankment, enriched by the pleasant atmosphere on the Buda side of the river. It is fully equipped with state-of-the-art technology.



## Technical Visits

On 3 June half day technical visits will be available.  
On 4 June a whole day tour will be offered combining technical visits and cultural programmes.

## Contacts

### Organising Society

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## Students and Young Engineers Programme

Alongside the main Congress, a Student Congress will be organised where engineering students from all over the world meet to present and discuss papers on automotive transportation and technologies. Students will be able to take part in the plenary sessions of FISITA Congress.



## Technical Exhibition and Sponsorship Opportunities

The accompanying technical exhibition is a highlight of the FISITA Congress. At FISITA 2008, 95 top international companies exhibited their products, services and technical capabilities to delegates attending from 40+ countries. They included passenger car and commercial vehicle manufacturers, component and system suppliers, suppliers of advanced electronics and software, engineering service providers, consultancies and specialists in testing, measurement and development solutions. All the companies working in and for the automotive industry are kindly invited also as exhibitors to the FISITA 2010 Congress.

A range of powerful sponsorship opportunities is also available. By sponsoring the FISITA Congress you demonstrate your company's commitment to supporting the latest global advances in sustainable mobility and you raise your profile among the most influential technical decision-makers in the global automotive industry.

For more information on the exhibition and sponsorship opportunities contact:

[fisita2010@diamond-congress.hu](mailto:fisita2010@diamond-congress.hu)

or visit the web site

[www.fisita2010.com](http://www.fisita2010.com)

