Prof. Dr. Ulrich Hackenberg will speak at FISITA 2014

Dr. Hackenberg is credited with restructuring technical development at Rolls Royce, developing the concept of the Bentley model range at Bentley Motors and revolutionising vehicle platform strategy for Volkswagen Group by developing the innovative Modular Longitudinal Matrix. He will deliver a keynote address during the opening session of the Congress on 2 June, 2014 in Maastricht.
Gearing up for FISITA 2014 World Automotive Congress

Insidetrack spoke with Prof. Dr. Jac Wismans, Chairman FISITA 2014 Scientific & Technical Committee and SAFETEQ founder about the 2014 Congress to find out what you can expect …

Why did KIVI NIRIA decide to host the FISITA World Automotive Congress in the Netherlands?

KIVI NIRIA, the Dutch association for engineers and engineering students and a FISITA Member Society is the largest engineering association in the Netherlands. As automotive is such an important area within KIVI NIRIA and our primary objective is to promote the importance of technology in society being able to host such a prestigious, international event came at the perfect time for us.

Why Maastricht in particular?

If you draw a circle with a radius of 200 km around Maastricht you clearly see how important the automotive industry is for the local and European economy. There are almost 300,000 people working in the automotive industry in this region which covers Flanders, Wallonia and North Rhine-Westphalia. There is great variety and diversity: high-tech manufacturing, raw materials suppliers, complex electronic components, powertrain development and innovation, as well as large OEMs (Ford, GM, DAF Trucks, Volvo and BMW coming soon to Born) together with passenger car production in Belgium of more than 800,000 vehicles.

Prof. Dr. Ir. Jac Wismans

Part-time Visiting Professor in Vehicle Safety at Chalmers University, Department of Applied Mechanics, Gothenburg, Sweden. President SAFETEQ, automotive safety consulting, the Netherlands.

Dr. Wismans joined TNO as a project manager in 1978 and was jointly responsible for the development of the crash analyses software package MADYMO as well as the set-up of TNO offices in Japan, Korea and the USA. From 1989–2007 he co-coordinated the European Passive Safety Network and the APROSYS Integrated Project.

In 2007 Dr. Wismans was appointed visiting professor at Chalmers University where he works on human body modelling R&D and the safety of future vehicles. He also managed the Competence Centre for automotive research (CCAR) up to 2008 and was awarded Privat Dozent at Graz University of Technology in Austria (2007–2009).

He is a board member of IROBI and member of the Stapp Car Crash Conference Advisory Board as well as authoring numerous publications in the field of vehicle safety. He has received several awards including the US Government Award for Safety Engineering Excellence in 1991.

Dr. Wismans founded SAFETEQ in 1998 (www.safeteq.com), working as an independent consultant in the field of automotive safety and is chairman of the Congress Technical Committee of the FISITA 2014 World Automotive Congress.
Gearing up for FISITA 2014 World Automotive Congress
Continued from page 2

The Congress theme is ‘Intelligent transport to solve our future mobility, safety and environmental challenges’, how will FISITA 2014 actually help engineers to tackle these challenges?

Like many industrialised countries, the Netherlands faces rapidly increasing pressures of road traffic congestion and traffic-related environmental problems (e.g. fine dust, noise, CO2 emissions). The Dutch government recognises and facilitates innovations in the field of sustainable road transportation. This creates an excellent social and cultural environment for developing and testing new mobility technology and can serve as an international example or ‘test environment’ for the automotive industry.

We are preparing a very interesting technical programme with more than 500 presentations divided over 10 sub-themes linked closely to the main theme. We are delighted to have received more than 800 high-quality abstracts and our reviewers worldwide are now involved in making their selections.

Are you planning any new innovations in the programme for next year’s congress?

We have several! Firstly, we offer authors two ways of presenting their work: a 20 minute presentation (including discussion time) or a shorter presentation in a session with similar topics, followed by a joint panel discussion. The latter replaces poster presentations and should give speakers a better way to present their work.

The second innovation is the introduction of the Executive Track. Intended for attendees with a broad interest in automotive R&D, the Executive Track brings together the best papers from each of the 10 Congress themes all in one place. Each Executive Track session features a specially invited keynote address to present a broad strategic overview of the theme, focusing on future challenges and roadmaps in that area. No other sessions in the same theme will run at the same time, to ensure delegates are able to see the best papers on the most pressing issues facing the automotive engineering community.

What do you expect will be the highlight of the Congress?

Apart from the Executive Track, the plenary session on automated driving promises to be very interesting. A number of Special Sessions are in development, for instance one on Worldwide Harmonisation of Safety Roadmaps which is my own field of interest. The opening plenary will set the tone for the rest of the Congress and we can look forward to an address from Dr. Ulrich Hackenberg, Member of the Board of Management of Volkswagen Brand.

We’re looking forward to welcoming the international automotive engineering community to Maastricht to what promises to be a valuable and essential event in the calendar.

Mobile Air Conditioning and Vehicle Thermal Systems

ATA – Associazione Tecnica dell’Automobile, together with the support of Centro Studi Galileo and Fiat Group Automobiles, will organise a European Workshop on ‘Mobile Air Conditioning and Vehicle Thermal Systems’. The event will be held in Turin, at the Istituto Amedeo Avogadro, from 5–6 December 2013.

The workshop will address key issues affecting vehicle manufacturers, suppliers of components and systems, technology providers, decision makers, engineers and scientists.

It provides an international platform to share knowledge and technical information regarding thermal systems and mobile air conditioning technology with industry professionals.

The topic areas are:

- Air Conditioning and Thermal Comfort
- Refrigerants and Safety
- Vehicle Thermal Management and Energy Efficiency Improvement
- Hybrids and Electric Vehicles Thermal Management and Air Conditioning
- Heat Recovery and Re-Use
- Thermal Storage
- Virtual Validation and 1D and 3D Modelling

The conference will be chaired by Carloandrea Malvicino (Fiat Group Automobiles) and is sponsored by Centro Ricerche Fiat.

More information:
Contact Marisa Giunipiero
marisa.giunipiero@ata.it
www.ata.it
When I started working on thermo-mechanical fatigue of brake disks in 2010 I began looking for conferences to share the knowledge obtained in my project. In 2011 I heard from scientists in the community about a new joint European conference on braking technology and in 2012 I was given the chance to present the latest results of our research group at EuroBrake2012. I found a platform for learning, sharing and discussing knowledge on my field of research and I was very happy with that.

Dipl.-Ing. Peter Raninger
Materials Center Leoben Forschung GmbH
Winner Best Written Paper at EuroBrake 2012

EuroBrake 2013 returned this year to Dresden, Germany, bringing together over 750 scientists, engineers, academics and business leaders for the world’s largest conference and exhibition dedicated to braking technology.

EuroBrake 2013 offered a full and diverse technical programme with 22 technical sessions addressing every aspect of braking technology, including a new Strategy Panel on Reducing Brake NVH. An exhibition 50% larger than 2012 and a host of social networking events offered delegates, exhibitors, sponsors and speakers the ideal platform to learn, share knowledge and build contacts.

The event, which took place from 17–19 June, Continued on page 5
EuroBrake 2013 builds on previous success
Continued from page 4

EuroBrake 2013 builds on previous success
Continued from page 4

featured more than 100 technical presentations, from speakers including Dr. Hans-Günther Paul, Director, Formulations and Review Know-How Management, Federal Mogul; Dipl.-Ing. Christian Domsch, Total vehicle integration-Vehicle Safety, BMW Group; and Dr. Hans-Jörg Feigel, Vice President, Development Future Brake Systems, Continental AG.

The exhibition proved to be a busy international marketplace once again with 70 international brake supplier companies from 16 different countries exhibiting, including some of the most innovative companies and institutes in the braking community worldwide.

During the EuroBrake Gala Dinner two prestigious awards were presented, recognising the outstanding presentations from the previous year’s conference. The ‘Best Presentation at EuroBrake 2012’, was awarded to Dr. Petra Severit, Federal Mogul and the ‘Best Written Paper at EuroBrake 2012’, was awarded to Dipl.-Ing. Peter Raninger, Materials Center Leoben Forschung GmbH.

EuroBrake 2014 takes place 13–15 May and will change location to the Lille Grand Palais, in the beautiful historic city of Lille in France.
www.eurobrake.net
The SAE 2014 World Congress & Exhibition takes place from April 8–10, 2014, at Cobo Center in Detroit.

The annual SAE World Congress will be hosted by Hyundai with Chung Kook Park, Senior Executive Vice President, Performance Development Centre, Hyundai, named as General Chair. Delphi have also been confirmed as Tier One Strategic Partner.

Chung Kook Park described what attendees can expect from the 2014 Congress, ‘While the industry continues to evolve, one thing remains constant: around every corner new possibilities exist; relationships evolve into partnerships. What once seemed innovative becomes the standard, the impossible becomes possible. By “Creating New Possibilities” at the 2014 World Congress, together we will shape the future of the automotive industry.’

The 2014 SAE World Congress will bring together automotive experts, management teams, engineers, and executives under the theme of “Creating New Possibilities” with the purpose of addressing current and future challenges and opportunities.

Hyundai announced as host of 2014 SAE World Congress

More information: www.sae.org/congress
2014 JSAE Annual Spring Congress: Call for Papers, Exposition and EVTeC & APE Conference

JSÆ is organising its annual Spring Congress for 2014 with opportunities to submit an abstract, exhibit in the Exposition, or participate in the EVTeC & APE event which takes place at the same time also at Pacifico Yokohama.

2014 Call for Papers

The JSAE Annual Spring Congress is the society’s largest event offering a programme of 500 presentations and attracting around 5,000 automotive engineers every year. The call for papers is open for the 2014 Congress and abstracts can be submitted online until 5 December 2013.

2014 Exposition

The Congress also features an international exposition which in 2013 welcomed 475 exhibitors and a record 78,255 visitors. If you are interested in exhibiting, you can find out more on the Congress website.

Exhibition enquiries should be made by 31 January, 2014.

2014 EVTeC & APE Conference

JSAE are also organising an international conference on electric vehicle technology and automotive power electronics: EVTeC & APE.

This conference will take place at the same time as the 2014 JSAE Annual Spring Congress and will focus on electronic systems and components in EVs, HEVs, PHVs, FCVs and conventional vehicles.

More information

2014 JSAE Annual Spring Congress
www.jsae.or.jp/2014haru/outline_e.html

2014 JSAE Annual Spring Congress Exposition
http://expo.jsae.or.jp/english

EVTeC & APE Japan 2014
www.evtec.jp
FISITA 2014: Shaping education for automotive engineers

An invited panel of speakers will come together to present their views on the future of automotive engineering education. The speakers will address essential questions in engineering education and cover the latest trends and developments from both education and industry perspectives.

Speaking at the 2014 Educators Seminar are:

Owen Carless Red Bull Racing & Formula Student Germany Chief Design Judge

Radu Mavrodin President HR Club & VP Human Resources for Euromed – Africa Region at Renault,

More information: www.fisita2014.com/educators-seminar

Educators Technical Session

The FISITA 2014 programme will also feature an Educators Technical Session to bring together educators and industry professionals in order to exchange knowledge, case studies and best practice in automotive engineering education.

We are inviting educators and industry professionals who are directly involved in the recruitment of graduate engineers, or their development, to submit an abstract online and join the debate on the future of automotive engineering education. The deadline for abstracts is 8 November 2013.

Submit an abstract: www.fisita2014.com/educators-technical-session

Important Dates

8 November 2013 Educators Technical Session: Deadline for abstracts

1 February 2014 Student Congress: Deadline for abstracts

28 February 2014 Travelling Fellowship: Deadline for applications

1 March 2014 Student Congress: Notification of acceptance

29 May – 2 June 2014 Travelling Fellowship Programme

2 – 6 June 2014 FISITA 2014 World Automotive Congress

How can students get involved with FISITA 2014?

Student Congress

The Student Congress will consist of four sessions during the FISITA Congress and is an ideal opportunity for students to present original work based on their automotive engineering thesis, or projects carried out as part of their studies. You can gain experience presenting your work to an international audience and perhaps even win a prize!

Submit an abstract: The deadlines for abstracts is 1 February 2014 www.fisita2014.com/student-congress

Islands of Excellence

Universities around the world have applied to present and demonstrate their innovative automotive engineering research projects as part of five ‘Islands of Excellence’ at the FISITA 2014 World Automotive Congress.

Each ‘Island’ or stand will showcase a different Congress topic or theme and will show how engineering students are addressing the key issues in automotive. The judging panel are currently assessing the applications and we will announce the five winning universities very soon!

Travelling Fellowship

FISITA and KIVI NIRIA offer young engineers and students under the age of 35 a once-in-a-lifetime opportunity to participate in the Travelling Fellowship Programme. The programme combines cultural and technical visits across Germany, Belgium and the Netherlands, followed by attending the FISITA 2014 World Automotive Congress.

The Programme gives students an unparalleled introduction to the international automotive industry as well as a platform to network and learn from industry and academic professionals.

Applications must be made by students directly to their FISITA member society. Each society can select one candidate only. Applications must also be accompanied by a paper abstract for the Student Congress.

Member societies should send their recommended candidate’s application to KIVI NIRIA by 28 February 2014 at congress@fisita2014.com

Download the application form: www.fisita2014.com/travelling-fellowship

Prof. Dr. Ir. Maarten Steinbuch Control Systems Technology, Department of Mechanical Engineering, Eindhoven University of Technology,

Dr. Kevin Perry Global Manager, Professional Development, SAE International.

Make sure to add this essential Seminar to your agenda when registration opens!
When did you first become interested in automotive engineering?
I was drawing cars since I could put pencil to paper, and learned to read from car magazines and books on cars. But then I got distracted, and engineering was actually my second choice of studies. Only after trying languages and history did I switch to engineering. I had a hard time getting to grips with maths and physics then!

What ambitions do you have for VDI-FVT?
My ambition is to fulfil the ambitions of our voluntary experts. They are the real driving force behind VDI-FVT. Nowadays we strive to inform public debate on automotive matters for the benefit of society.

These are very interesting times in the history of the car, because everybody used to take the benefits of the car for granted, but at the same time almost everyone is concerned about the impact it has on the environment and society.

What is the most important challenge faced by VDI-FVT?
To make ourselves heard in Germany, where the debate on the car is never-ending and there are a huge number of people and institutions and pressure groups that join in. We have changed our focus to this kind of work only recently, so we have rather a long way to go.

What do you like about working in Germany?
I think it is fair to say Germany is a country of choice for anyone interested in cars. Germans are passionate about technology and there are many very knowledgeable people about.

At the same time, technology is constantly questioned within society, because of the strength of environmental protection pressure groups here. It is a cultural facet that is deeply rooted in the German mentality to moralise on everything—think of the reformation and Martin Luther.

That makes for profound and stimulating debates, albeit all very serious. But thankfully, Germany is an exporting nation and that means that there is much scope to get interested in other countries and their cultures and markets, which adds some spice.

What do you do when you are not working?
I like to keep things in running order, especially my old Triumph Vitesse convertible, and my foreign languages. I am a bit more of a perfectionist about languages, they are less rusty, and a good pastime for rainy days. It often rains in Germany, so there is plenty of opportunity for reading, watching movies and listening to songs and web radios in English, French and Italian, and indeed sometimes even in German. When my family let me that is! My eldest daughter has left home to study (mathematics: she is cleverer than her dad apparently), but I still like to have my son and my younger daughter around. And my wife still bears with me too.

If you could drive any car in the world, what would it be?
Since I am a true petrol head, I could give you at least three different answers a day to that! Most of it would be classic cars that were ordinary means of transport in their day, because the social history of the car just fascinates me.

But if someone came up with a modern-day equivalent of the Citroën 2CV – economical, practical, light, simple, softly-sprung, kind, poetic and endearing, but with modern-day safety and reliability – that would be my everyday car.

Name
Thomas Albrecht

Role
Secretary, VDI-FVT

Location
Germany
 STA welcomed 31 teams from 8 countries for the 2013 event, with competitors coming from Germany, Italy, the Netherlands, Portugal, Romania, Spain, Switzerland, and the UK. The STA team was supported by 200 volunteers with 800 visitors and spectators coming to see the teams in action. For the first time, the 2013 competition hosted more electric car teams (17) than combustion car teams (15) and the final results revealed the current dominance of the German teams. Rennstall Esslingen won the Combustion category, followed by CAT-Racing and Dynamics e.v. (all German) and MunichMotorsport won the Electric category, followed by Horsepower Hannover and Racetech Racing Team (also all German). For several teams it was the first time that they had entered a Formula Student event at the Circuit de Catalunya and they all confirmed their goal is to keep on competing and make improvements year on year, in order to gain experience and knowledge. The Formula Student competition also showed signs of growth for STA as two-thirds of the teams competing in 2013 had competed in previous Formula Student Spain competitions. Despite Formula Student Spain being a relatively small event, an extensive social program, sightseeing tours, workshops and more proved very attractive to student teams in addition to the competition itself. Following the event, STA President Francesc González thanked all those involved in the smooth running of the programme, saying, ‘We as Formula Student Spain organisers want to thank the companies who have supported FSS. Companies such as SEAT, APPLUS+ IDIADA, GAS NATURAL FENOSA, ALTRAN, AVL, SIEMENS, ASCAMM and ESI GROUP, believe in Formula Student as a key project to power young engineers and new technologies.’ ‘Last, but not least, we wish to thank the Formula Student Spain volunteer community, made up of more than 200 professionals from the automotive sector. All of them shared their passion with the participants and the energy of the volunteers became the true spirit of the event. They brought colour and personality to the competition and promoted a sense of cooperation, honesty, and a positive atmosphere amongst the participants. Without them, the event would not have been possible.’

More information:
www.formulastudent.es

Student teams compete at Formula Student Spain

STA, the Spanish Society of Automotive Engineers, held the fourth Formula Student Spain competition at the Circuit de Catalunya in Barcelona earlier this year.
FISITA invites you to submit nominations for the 2014 FISITA Medal.

The FISITA Medal recognises distinguished achievements in the automotive industry. Examples of the categories into which such achievements may be placed include:

- a long and successful career in the automobile industry
- a specialist contribution to a particular sector in the automobile field
- the leadership/direction of a defined project
- an innovative/creative design concept
- a high technology manufacturing system

The deadline for receipt of nominations is Monday 20 January 2014. The Medal Committee will make their recommendation to Council for approval shortly thereafter. The 2014 award will be presented in June 2014 at the FISITA 2014 World Automotive Congress, Maastricht.

All submissions must be made using the official nomination form and should include a citation in support of the nomination.

To find out more including how to request a nomination form please contact
Kelly Williams
k.williams@fisita.com

YOUR FUTURE IN AUTOMOTIVE

THE ESSENTIAL WEBSITE FOR STUDENTS AND YOUNG ENGINEERS

Engineers working in automotive are finding solutions for the world’s most important issues: climate change and new propulsion technologies, saving lives by developing new safety technologies and so much more.

If you want a career that can take you anywhere and where you can design, shape and engineer the future, visit Your Future In Automotive.

www.yourfutureinautomotive.com
The Barcelona International Motor Show took place from 9–19 May and STA, the Spanish Society of Automotive Engineers, together with Fira de Barcelona the motor show organisers, presented awards to the top vehicles in three categories: ‘Safety Systems Progress’, ‘Green Car’ and ‘Best Design’.

The judges, (professionals chosen from the automotive industry and academia), evaluated the candidates while motor show visitors voted for their winners using Facebook. Votes were received for the Best Design in the Barcelona Motor Show, with Audi receiving top honours:

1. Audi R8 Spyder
2. Mercedes CLA-Class
3. SeatLeon SC

The panel for Safety Systems Progress took into account the number of safety systems and the mass of the vehicle to measure the safety in every car nominated. The winner of this category was the Mercedes-Benz E-Class with its 11 advanced driver assistance systems:

1. Mercedes-Benz E-Class
2. Mazda 6
3. Honda CR-V

Finally, the Jury in charge of Green and Efficient cars had the particularly difficult task of comparing and evaluating different powertrain systems in order to establish which car was the most efficient. Judges focused not only on local emissions and consumption, but also downsizing and lightweight design in order to make the final decision.

The judges underlined the improvements in the field of efficiency, where competition was especially close, however the Volkswagen XL1 won the final award:

1. Volkswagen XL1
2. Mazda 6
3. Nissan Leaf
Challenge Kart Low Cost is a competition between two automotive engineering schools: Institut Supérieur de l’Automobile et des Transports de Nevers from the University of Bourgogne, France, and the Automotive and Transports Department from the University of Pitesti, Romania.

The 2013 KLC competition took place on 28 May at the F-58 track at the French Formula 1 circuit of Magny-Cours. The KLC consists of two competitions: one with thermal engine powered karts and the other with electric motor powered karts. This year, University of Pitesti came with 1 thermal kart and 1 electric kart, while ISAT de Nevers had 2 thermal karts and 1 electric kart.

Each team had the aim of developing a kart over one academic year, whose cost is not to exceed €2000 (thermal) or €3000 (electric), to participate in May in a motor-sport academic competition. The project underlines the basic competences of an engineer, such as teamwork and organisation skills, working within the constraints of budget and time and creativity and innovation.

KLC is not just a simple go-karting race but a technological, educational and human challenge and the winner is not necessarily the fastest!

Competition Goals
- Learning/completion of all stages of a product’s development (design, manufacturing, etc)
- Understanding problems that occur from the need to achieve an optimal operational product, experiencing compromise, adhering to precise technical specifications
- Encouraging innovation through freedom of design within technical regulations, allowing students to develop and apply their ideas
- Product development, respecting constraints of budget and time
- Development of competitive spirit amongst students
- Encouraging students to develop complementary competences, to open their minds, which is indispensable for the future professional life
- Provide an environment to encourage reflection on what automotive engineering really means and which allows knowledge and cultural exchange with people from different nationalities

More information:
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SAE – Branded for Success

SAE International recently undertook a rebranding process in order to provide better services and clearer communication for their members. This included a redesign of their official website to help clearly communicate SAE International’s aims and objectives.

The rebranding process was a process of uniting SAE as an organisation around the common purpose of providing knowledge exchange for mobility engineers in the aerospace, automotive and commercial vehicle industries.

The updated brand will also help to align the SAE sub-brands such as the Collegiate Design Series™ and A World In Motion®, under the new SAE International brand. It is also designed to bring SAE’s work with standards and technical papers closer together with its higher education learning programmes and its efforts to improve global mobility.

David Schutt PhD, Chief Executive Officer of SAE International, explained further, ‘SAE International’s rebranding effort helps to better serve the members in more meaningful ways than ever before.’

‘With practical knowledge and expertise, SAE International offers its members assurance and confidence amidst the ever-competitive world of mobility engineering. SAE International will work with its members and customers to move the mobility engineering profession forward.’
2014 FISITA Recognition of Service Awards

Do you know someone who has made an outstanding contribution towards FISITA’s work and the advancement of its goals or who has increased motivation and a sense of common purpose amongst FISITA activists?

The FISITA Recognition of Service Award recognises the achievements and highlights the importance of volunteer member involvement in the overall success of FISITA.

On receipt of your nominations the Internal & External Relations Committee will make recommendations to the Executive Board for approval. The 2014 awards will be presented during the Council dinner in Maastricht, June 2014.

Nominations can be made by any member of a FISITA Society. The deadline for nominations is 03 February 2014 and further information, including a list of past recipients can be found in the Members Area of the FISITA website.

Submit your nomination:
www.fisita.com/membership/membersarea

If you have any queries please contact
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