



Programme

2nd Ricardo Motorcycle Conference
16th November 2015
Milan

Scientific Board



Prof. Dr. Angelo Onorati – Politecnico di Milano, Department of Energy

Professor at the Department of Energy of Politecnico di Milano. Since 2004, he has been a member of SAE (Society of Automotive Engineers) and on the editorial board of the International Journal of Engine Research. In April 2011 he received the Lloyd L. Withrow distinguished speaker SAE award. Currently he coordinates the activities of the Internal Combustion Engine Group at Politecnico di Milano, working in the field of internal combustion engine CFD modeling and simulation. During the last decade he has carried out industrial research projects with MV Agusta, Piaggio, Lafranconi Silencers, Aprilia and Husqvarna.

Paul Etheridge – Head of Strategy Motorcycle & Urban Mobility at Ricardo

Paul joined Ricardo in 1978, becoming Head of Motorcycle Engineering in November 2012. Paul bought his first motorcycle at the age of 10, and since that time has owned more than 60 different road bikes, rebuilding and repairing many of them along the way. With over 25 years' experience in the motorcycle industry, Paul has gained particular expertise in the development of a wide range of different motorcycle engines, leading multiple motorcycle engineering programmes during his career. He was also a member of the World Super Bike team between 2004 and 2006.

Geoff Liersch – Head of Two-Wheeler & Powersports at BOSCH

Geoff started his working life with Siemens VDO Automotive in Melbourne, and in 2005 he joined Bosch Australia in the Body Electronic group. Having held various positions worldwide in the body electronic area he is now responsible for Two-Wheeler & Powersports within BOSCH as Managing Executive Officer. He is located at BOSCH Corporation Japan. Geoff has also assumed a director's position on the board of the Society of Automotive Engineers. Having grown up on a farm in Australia his first bike was given to him at an age of just 4 years and he's still a keen motorcycle rider today.

Welcome!



On Monday 16th November 2015, the day before EICMA 2015 opens its doors to the industry, the 2nd Ricardo Motorcycle Conference will take place, once again bringing together top global motorcycle industry experts in Milan.

The conference will pick up on a number of topics focusing on the current trends and future drivers of the motorcycle world, including the challenges, direction and trends of tomorrow's two-wheelers, future emissions legislation, the latest developments in rider assistance systems as well as allowing everybody the opportunity to develop their personal network in smaller, more intimate surroundings prior to the start of the show.

The conference will take place at the Museo Nazionale della Scienza e della Tecnologia Leonardo da Vinci, in Sala del Cenacolo, an impressive 16th century building.

Deus ex machina and other customising companies are riding the wave of motorcycle customising and personalisation and during the evening we offer delegates the chance to breathe in a little of the spray as we host an event at the restaurant of Deus ex machina. You will have the opportunity to expand your network of like-minded people and make valuable global motorcycle industry contacts in fascinating surroundings, next to the Deus showrooms, in an area that is very fittingly known as being Milan's motorcycle customizing heart.

I look forward to welcoming you to the conference.

Paul Etheridge

On behalf of the scientific board

A handwritten signature in blue ink, appearing to read 'P. Etheridge', written in a cursive style.

Programme

- 08:30 **Registration**
Reception with coffee and tea
- 10:00 **Welcome and Opening**
Dr. Robert Hentschel, Managing Director – Ricardo Deutschland GmbH
- 10:10 **Keynote Speech**
Luca Carmignani, Head of Innovation – Piaggio S.p.A.
- Future Vehicle Technologies**
Moderator: Prof. Dr. Angelo Onorati
- 10:30 **An Effort to Make Electric L-Vehicles Attractive: Challenges of RESOLVE Project**
Dr. Mario Donato Santucci, Dr. Marco Pieve – Piaggio S.p.A.; Karl-Maria Grugl, Toni Stoeklmeier – KTM AG; Stefano Granvillano – Ricardo Deutschland GmbH; Dr. Marco Pieve – Resolve EU Project (Consortium)
- 11:00 **Semi-Active Suspension in Motorbikes**
Stefan Haist, Christopher Herz, Gerald Matschl – KTM AG; Johannes Wimmer – WP Performance Systems GmbH
- 11:30 **Motorcycle Stability: Riding Safety Improvement via ADAS and Semi-Active Applications**
Prof. Dr. Frederico Cheli, Dr. Elisabetta Leo, Dr. Marco Ezio Pezzola, Niccolò Taroni, Simone Tedesco, Dr. Marco Ezio Pezzola – Politecnico di Milano, Department of Mechanic and Soluzioni Ingegneria
- 12:00 **Lunch**
- Future Powertrain Technologies**
Moderator: Geoff Liersch
- 13:15 **1D-3D Fluid Dynamic Optimisation of a Moto3TM Engine**
Prof. Dr. Gianluca Montenegro, Dr. Tarcisio Cerri, Dr. Augusto Della Torre, Prof. Dr. Angelo Onorati – Politecnico di Milano, Department of Energy
- 13:45 **G-Drive: A Novel CVT System for Scooters**
Jing Yuan – Gates Corporation

- 14:15 **Methodology of Two Stroke Engine Development with Respect to EU4 and Future Emission Legislations**
Prof. Dr. Roland Kirchberger, Prof. Dr. Helmut Eichlseder, Dr. Franz Winkler, Roland Oswald – Graz University of Technology, Institute for Internal Combustion Engines and Thermodynamics
- 14:45 **The Development of a Desmodromic Variable Timing System**
Vincenzo De Silvio – Ducati Motor Holding S.p.A.
- 15:15 **Introduction of Yamaha Blue Core Engine**
Hayatoshi Sato – Yamaha Motor Co., Ltd.
- 15:45 **Coffee Break**
- Market Drivers**
Moderator: Paul Etheridge
- 16:30 **Connectivity for Motorcycles – A Move into a New World**
Matthias Mörbe, Christian Cosyns – Bosch Engineering GmbH
- 17:00 **Euro 5 Effect Study for L-Category Vehicles (Two, Three and Four-Wheel Vehicles)**
Dr. Alessandro Zardini, Giorgio Martini – European Commission, Institute for Energy and Transport, Sustainable Transport Unit
- 17:30 **Closing Remarks**
Dr. Robert Hentschel, Managing Director – Ricardo Deutschland GmbH
- Guided tour through the National Museum of Science and Technology Leonardo da Vinci**
- Transfer to Deus ex machina**
- 19:30 **Dinner and Evening Event**

Event



About the Conference

Each year in November, motorcycle developers from all over the globe travel to Milan to take part in EICMA, the world's largest motorcycle exhibition. Ricardo contributes its expertise and passion for motorcycling to that industry all over the world but had yet to find a conference with a clear and genuine focus on integrated motorcycle development, and so the idea was born among the biking enthusiasts at Ricardo to provide a vehicle to bring together global engineering capabilities.

This took the form of the inaugural Ricardo Motorcycle Conference which took place in 2014. The Conference endorsed the clear message: It's about connecting like-minded people all over the world – not a barely concealed selling event! During the one day conference we discuss the challenges, directions and trends of future two-wheelers, learn about local legislative restrictions and afford everybody the opportunity to develop their personal network in smaller and more intimate surroundings prior to the Show.

About Ricardo

Ricardo has had a long association with motorcycle engineering, dating back to the 1920s. Examples are Triumph (4 valves cylinder head in 1921), Vauxhall (complete motorcycle in 1922) and Harley Davidson (combustion system in 1934). The Ricardo motorcycle group was formalised in 1992 to provide a dedicated technical resource and to grow the business (at this time based in Great Britain). Since 1992 Ricardo completed more than 160 motorcycle projects for more than 40 different clients in engine, transmission, driveline, vehicle and control and electronics. The Centre of Competence for motorcycle engineering nowadays is located at Schwaebisch Gmuend in the South of Germany. From here a dedicated team is organising the Ricardo Motorcycle Conference at Milan. In November 2014, Ricardo Motorcycle was created by incorporating a specialist team in Great Britain (formally Vepro Ltd) and the formal partnership with Exnovo Srl in Italy.

Conditions

Registration fee

€ 490,- plus VAT

This price includes conference documentation, refreshments, lunch and evening event.

Venue

Museo Nazionale della Scienza e della Tecnologia Leonardo da Vinci
Via San Vittore 21
20123 Milan, Italy

Deus Café
Via Thaon di Revel 3
20159 Milan, Italy

Please send the registration form by E-mail, fax or post to:

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Gueglingstr. 66
73529 Schwaebisch Gmuend
Germany

Phone: +49 7171 9821 539
Fax: +49 7171 9821 639
E-mail: motorcycleconference@ricardo.com
www.motorcycleconference.com

No cancellation charge is due if registration is cancelled by 16th October 2015. Cancellations made after that date will incur a charge of 50 % of the registration fee. For cancellations made after 30th October 2015 the full registration fee is payable. Cancellations must be made in writing. The date of the postmark will determine whether the deadline has been met. We will gladly accept a replacement delegate at no extra charge.

Should a speaker be unable to attend at short notice by reason of force majeure, illness, accident or other circumstances for which Ricardo Deutschland GmbH cannot be held responsible, another qualified person will be appointed to the exclusion of any claim for compensation. Should the event be cancelled altogether, we will of course refund the registration fee.

No conference documentation may be reproduced or transferred to third parties without the express written consent of Ricardo Deutschland GmbH. Photographing the presentation slides and taking audio and video recordings of the event are not permitted.

Data Protection

Please be aware that your personal data will be collected, stored and processed for further internal processing, as well as for advertising purposes, according to the legal provisions of the German Data Protection Act (BDSG). We will not disclose your personal data to third parties, unless this is necessary to provide the service or to carry out the contract.

You can disagree with the data collection, storage and processing at any time by contacting motorcycleconference@ricardo.com.

Registration

16th November 2015, Milan



**MOTORCYCLE
CONFERENCE**

I hereby confirm my participation in the Ricardo Motorcycle Conference on 16th November 2015 in Milan. I accept the conditions and the attendance fee of € 490.- plus VAT.

Title/Name: _____

Company/Institute: _____

Department: _____

Function: _____

Street/P. O. Box: _____

Postal code/City: _____

Country: _____

VAT: _____

Phone: _____ Fax: _____

Mobile: _____

E-Mail: _____

Invoice Address (if different from above address): _____

Date

Signature