



APE

CONGRESS ON AUTOMOTIVE POWER ELECTRONICS



International Conference & Exhibition

April 14 & 15, 2015

Paris | Center of congress of La Villette



PROGRAMME

A large graphic of a double-lined arrow pointing to the right is positioned to the left of the word 'PROGRAMME'. The word 'PROGRAMME' is written in large, bold, white, sans-serif capital letters, with the 'M' and 'E' appearing slightly faded or overlapping. The background features a faint, light blue circuit board pattern with various electronic symbols like resistors, capacitors, and diodes.

Sponsor:

THALES



In the past two years since our last APE, Power Electronics has become even more important growth domain in automotive industry. Electric, hybrid and electrified vehicles are a fact. The question is no longer when, but how will a car be equipped with a 48 V system, an electric booster, an energy recovery system, a powerful drive.

In addition, the world of electric vehicles has changed. Car manufacturers offer today cars, that are fun to drive, that give an equivalent value for the purchase price and that can assume performance and quality.

At the same time, the key enablers, power semiconductors and passives are progressing rapidly making an affordable business case for electric cars reachable.

In this environment, APE 2015 will address first of all this market and technology evolution and will then address details in energy management, architecture, packaging, reliability, safety.

We hope to be able to convince you to come and join us for 2 interesting days of exchange in Paris on the topic of power electronics.

COMMITTEE

CHAIRMAN

Jochen LANGHEIM | STMICROELECTRONICS

ORGANIZING COMMITTEE

Hans-Peter FEUSTEL | CONTINENTAL

Thomas HARDER | ECPE

Patrick LETEINTURIER | INFINEON

Jean-Benoît MOREAU | STMICROELECTRONICS

Jean-Michel MORELLE | VALEO

Daniel RICHARD | VALEO

Xavier ROTH | ROBERT BOSCH

Bénédicte SILVESTRE | VALEO

Andy TOULEMONDE | INFINEON

Michel VALETTE | ELMOS

Louis-Claude VRIGNAUD | CONTINENTAL



PROGRAMME, APRIL 14, 2015

08:15	Attendees registration / Welcome breakfast
	OEM KEYNOTES & MARKET VIEW • Session chair: Jochen Langheim STMicroelectronics
09:00	Introduction: View on the Market Revolution of Electric Mobility Jochen Langheim, Chairman of the congress STMicroelectronics
09:10	Automotive Electronics: Opportunities & Threats Ian Riches, Director - Automotive Practice Strategy Analytics
09:30	Vehicle Electrification at Peugeot Citroën Jean-Marc Finot, VP Research & Advanced Engineering PSA Peugeot Citroën
09:50	Opportunities for Electric Powertrain by increased Operation Voltage Wolfgang Wondrak, Hardware Power Electronics - Hardware & Charging Technology Daimler
10:10	Power Electronics Stakes for Vehicle Manufacturer Bertrand Largy Renault Nissan Alliance
10:30	Coffee break
	ELECTRIC AND HYBRID VEHICLES ARCHITECTURES AND TRENDS IN POWER ELECTRONICS AND DRIVES Session chair: Daniel Richard Valeo
11:00	Introduction: Into Architectures and Trends in Power Electronics and Drives Daniel Richard, Group R&D Functional Excellence Valeo
11:10	General Trend in Electrification and Power Electronics from a Supplier Point of View Jürgen Bilo Continental Automotive
11:30	Valeo Electric Machines & Inverters Development Synergies for Hybrid and Electric Vehicles Philippe Farah Valeo
11:50	A Full SiC High Power High Frequency Drive for Motorsport Electrical Turbocharger Application Andrea Dappiano Magneti Marelli
12:10	Enhanced Flexibility of Inverter design by applying 2 in 1 Double Side Power Module Ryuichi Saito Hitachi
12:30	Lunch break
	REVOLUTIONS IN POWER COMPONENTS • Session chair: Thomas Harder ECPE
14:00	Introduction: Revolution in Power Components Thomas Harder, Managing Director ECPE
14:10	Great Potential of SiC Devices for Environmentally Friendly Vehicles Kimimori Hamada Toyota Motor Corporation
14:25	Next Level Silicon, SiC and GaN Franck Wolter Infineon
14:40	Practical Benefits at System Level using Wide Band Gap Materials in Next Electric Car Generations Jean-Benoît Moreau STMicroelectronics
14:55	High Power Density Automotive Converters using SiC or GaN Power Devices Bernd Eckardt Fraunhofer IISB
15:10	Questions & Answers Panel discussion
15:30	Coffee break
	EVOLUTIONS IN PASSIVE AND PACKAGING • Session chair: Jean-Michel Morelle Valeo
16:00	Introduction: Evolutions in Passives and Packaging Jean-Michel Morelle, Process & Advanced Technologies Developments Valeo
16:10	High Power Motors and DC/DC Converters Enhanced with the System in PCB Technology: P² Pack[®] Christian Rössle Schweizer
16:25	EMC Filter Solutions for High Voltage and Low Voltage Power Applications in Hybrid and Electric Vehicles Heiko Dalichau Epcos (TDK)
16:40	Integration of Active and Passives Components on Silicon or Glass Christian Nopper STMicroelectronics
16:55	Embedding of Power Semiconductors for Innovative Packages and Modules Lars Böttcher Fraunhofer Institute-IZM
17:10	Questions & Answers Panel discussion
18:00	Special address • Jean Brunol SIA President
18:15	Cocktail in the exhibition

PROGRAMME, APRIL 15, 2015

08:05	Breakfast
	SYSTEM INTEGRATION FROM MECHATRONICS TO CYBERPHYSICAL SYSTEMS Session chair: Patrick Leteinturier Infineon
08:30	Introduction: The State of the Art and Future Trends Patrick Leteinturier, Fellow Automotive Powertrain Systems Infineon
08:40	Power Module Technology Yoshitaka Nishimura Fuji Electric
09:00	New Mechatronic Device linked with the Autonomous Car Bénédicte Silvestre Valeo
09:20	3D Power Module Assembly Philippe Favre ASPI3D
09:40	A New Approach to power Electronics System Integration with Enhanced Cooling Solutions Jonas Grönvall Infineon
10:00	Coffee break
	SMART ENERGY MANAGEMENT IN VARIOUS APPLICATION BLOCKS IN THE ELECTRIFIED CAR Session chair: Jean-Benoît Moreau STMicroelectronics
10:40	Introduction: Smart Energy Management Jean-Benoît Moreau, Product Marketing Director for Power Semiconductors for Automotive market STMicroelectronics
10:50	On-board Fast Chargers XXXX Delta
11:10	Automotive Electrification, current and future Architectures, Challenges and Solutions Edmund Erich ZVEI partners - Delphi
11:30	Power Trading Control of Electrical Loads Mariano Sans Continental Automotive
11:50	Wireless charging for Electric Vehicles – Recent Evolutions of the State of the Art – an Overview Jacques van Wittenberghe e-Road
12:10	Lunch break
	SAFETY, ROBUST DESIGN AND (COST EFFECTIVE) MANUFACTURING OF AUTOMOTIVE POWER ELECTRONICS SYSTEMS Session chair: Louis-Claude Vrignaud Continental Automotive
14:00	Introduction: The State of the Art and Future Trends Louis-Claude Vrignaud, Director Public-Private Partnerships Continental Automotive
14:10	Gate Drive Unit in the Light of Functional Safety Hans-Peter Feustel Continental Automotive
14:30	A New Reliability Methodology for the Validation of Mechatronics Systems David Delaux Valeo
14:50	Reliability and Safety Monitoring for more Electrical Transportation Bruno Allard Institut Ampère - INSA de Lyon
15:10	Understanding SiC Mosfet Reliability Issues under Harsh Environment switching Conditions Remains a Challenge Georges Peyresoubes Thales Microelectronics
	CLOSING ADDRESSES
15:30	Keynote (Public Authorities or OEM)
16:00	About APE Japan Kimimori Hamada Toyota
16:30	Closing speech
16:40	End of the conference

EXHIBITION & SPONSORING

This unique event will bring together more than 200 participants: directors, managers, heads of department, engineers, researchers and technicians. An exceptional line-up of guests and speakers will be present for the occasion. The exhibition will allow you to show-case your company, present your latest products and create privileged contacts within this unique gathering of targeted decision-makers.



Maximize your visibility by becoming a sponsor! With a corporate sponsorship, you gain unmatched recognition as an industry leader and generate an abundance of goodwill.

Consider our 4 packages:

- BRONZE
- SILVER
- GOLD
- PLATINUM (for one company only)

SPONSORING PACKAGES

	Standard	Bronze	Silver	Gold	Platinum
RATES (exc. VAT)	2 800 €	3 600 €	6 000 €	8 500 €	10 000 €
Fitted-out booth	6 sqm	9 sqm	12 sqm	18 sqm	24 sqm
Included invitations	2	4	5	8	12
Logo on all congress materials (programme, book of conference, CD, signs...)		X	X	X	X
10 lines about your company on the congress website (www.sia.fr)		X	X	X	X
Ad in the book of conference		half page	half page	full page	full page
Ad in the programme			half page	full page	full page
Corporate banner in e-mailing campaign				X	X
Company leaflet or goodies enclosed in the conference bag					X
Announcement as major sponsor					X
Preferential placement in the exhibition area					X
Discount on extra badges*	-0%	-10%	-20%	-30%	-50%
Extra space	600 € per square meter				

*As small firms and labos enjoy a lower rate, they can't benefit from this extra discount

ADVERTISING

(exc. VAT)	Back cover	Inside	Inside front cover	Inside back cover
Programme (sent once by mail and several times by e-mails)	1 300 €	950 €	1 100 €	1 100 €
Book of conference (distributed to all attendees)	1 300 €	950 €	-	1 100 €
Insertion of leaflet in the conference bags			1 000 €	
Cords and badges supply			1 000 €	
Conference bags supply			600 €	

REGISTRATION FORM

Conference "APE - Congress on Automotive Power Electronics" - April 14 & 15, 2015

Ref: 2015-05

PLEASE COMPLETE AND RETURN THIS FORM TO:

SIA - 79, rue Jean-Jacques Rousseau - F-92158 Suresnes Cedex / Tel: +33 (0)1 41 44 93 70 - Fax: +33 (0)1 41 44 93 79

REGISTER DIRECTLY ON LINE: www.sia.fr

Please use BLOCK CAPITALS

M^{rs} M^s M^r D^r Dipl-Ing

Family Name: _____ First Name: _____

Company: _____ Department: _____

Position: _____

Address: _____

Postcode: _____ City: _____ Country: _____

Tel: _____ Fax: _____

Email: _____

VAT number: _____

Registration fees

- 1056 € VAT Incl.** (880 € VAT Excl.) - SIA Members
- 1188 € VAT Incl.** (990 € VAT Excl.) - Non Members
- 594 € VAT Incl.** (495 € VAT Excl.) - Co-authors* Researchers*, Labs* and Small Firms* (< 100 employees)
- 0 € VAT Incl.** - Speakers and Chairmen

Preferential rates for students, retired people and groups • For further information: pauline.senis@sia.fr

**Small firms, Researchers and laboratories must not come under the control of big firms (> 100 employees).*

Payment (Please precise the invoice address)

- By check in Euros** made payable to: "Société des Ingénieurs de l'Automobile"
- By bank transfer in Euros** made payable to: "Société des Ingénieurs de l'Automobile" (please enclose a copy)
IBAN: FR76 30003 03290 00020040139 58 - BIC - Adresse SWIFT: SOGEFRPP
Please, precise your company name and reference: 2015-05 APE

By credit card: American Express Diners Visa Eurocard Mastercard

I hereby authorise the organisers to charge my credit card to the amount of _____ €

On my Card n°: _____ Expiration date: _____ / _____

3 or 4 digit CVV or CVC number (on back or front of credit card): _____

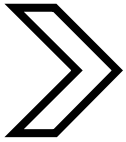
Cardholder's name: _____

Date and signature:

Company stamp:

REGISTRATION CONDITIONS

- Registration fees include participation in the conference, CD of proceedings, book of abstracts, refreshment breaks, lunches and dinner.
- Where it is not possible to send the payment together with the form, each registration should be accompanied by an official purchase order. Failing reception of an official purchase order or payment on the day of the congress, we regret that you will not be allowed entry to the congress.
- When we have received the registration form, we will send you a confirmation message and an invoice. Please indicate the accounts department address where necessary.
- In case of cancellation before March 15, 2015, 30% of the registration fees will be retained.



GENERAL INFORMATION



OFFICIAL LANGUAGE

English: no simultaneous translation



VENUE / ACCESS

Centre des Congrès de la Villette
Cité des Sciences et de l'Industrie

30, avenue Corentin Cariou
75019 PARIS



BY CAR

Parking

Entrance at « quai de la Charente ». Open every day 24/24.
1600 places with direct access.

Taxis

Entrance by « quai de la Charente » or by « boulevard Mcdonald ».



BY MÉTRO

Line 7 in direction of « La Courneuve - 8 mai 1945 »
Get out at station « Porte de la Villette ».



SNCF

« Gare de l'Est » is 10 minutes away by metro,
« Gare du Nord » (Eurostar & Thalys) is 15 minutes,
« Gare Saint-Lazare » & « Gare Montparnasse » are 30 minutes,
« Gare de Lyon » is 40 mn away by metro.

HOTEL ACCOMMODATION

We have selected a list of the most convenient hotels situated near the “Centre des Congrès de la Villette”. Delegates are encouraged to make their own hotel reservations early, directly with the hotels of their choice.



© CSI-Sylvain SONNET

FOREST HILL***

28 ter av. Corentin Cariou
75019 PARIS
+33(0)1 44 72 15 30
www.forest-hill.com

B&B HOTEL

4 r Emile Reynaud
75019 Paris
+33(0)8 92 70 75 50
www.hotelbb.com

ADAGIO ACCESS (APARTHOTELS)

28 Bis Corentin Cariou
75019 Paris
+33(0)1 44 72 42 00
www.adagio-city.com

IBIS HOTEL

31 quai Oise
75019 PARIS
+33(0)1 40 38 04 04
www.ibis.com

CAMPANILE HOTEL

147 av Flandre
75019 PARIS
+33(0)1 44 72 46 46
www.campanile.fr

HOLIDAY INN

68 Quai De La Seine
75019 PARIS
+33 (0)8 00 91 16 17
www.holidayinn.com