

NVH Challenges of Modern Efficient Automotive Powertrains

Conference



CONTEXT & OBJECTIVES

The modern powertrains should be efficient, have to respect the ${\rm CO_2}$ strategy of carmaker by minimizing fuel consumption and have to meet high performances in final pollutant emission while still reaching the drivability and the NVH targets.

In order to fulfill all these requirements some technology breakthroughs are introduced recently:

- Downsizing and downspeeding of IC engines
- Diminishing number of cylinders
- Cylinder deactivation and variable compression
- Stop and Start devices and hybridization
- Assisted and other innovative turbocharging technologies
- Innovative torque irregularity filtering and vibration decoupling
- New automatized transmissions
- New combustion technologies
- Innovative powertrain suspensions
- Range extender
- Energy recovery
- Application of roller bearing in powertrain
- Engine encapsulation

The conference will deal with the NVH problems induced by the new technologies mentioned above. The SOUND RADIATION, TORQUE IRREGULARITY and VIBRATION as well as the INTEGRATION within the vehicle of powertrains equipped with such recent technology will be addressed.

CONFERENCE LANGUAGE:

ORGANISING COMMITTEE

CHAIRMAN



LÉON GAVRIC SENIOR EXPERT IN NVH PSA PEUGEOT CITROËN

COMMITTEE MEMBERS

PASCAL BOUVET - VIBRATEC
ARNAUD COURJAL - SIEMENS
NICOLAS DAUCHEZ - UTC
ARNAUD DUVAL - FAURECIA
JEAN GRATADOUR - SIA
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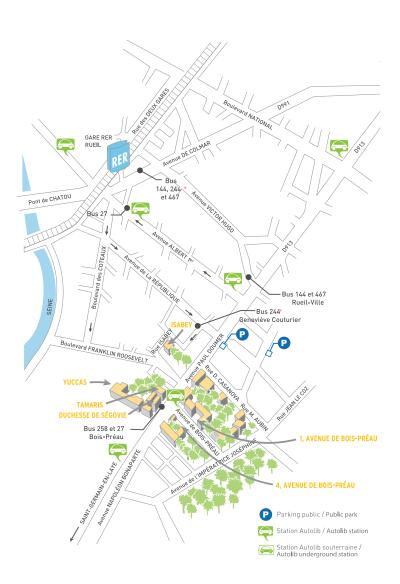
Rates (exc.VAT)	Back cover	Inside page
Ad in the book of conference [1]	800€	500 €
Insertion of 1 booklet or 1 flyer in the conference bag	600 €	
Your company conference bag for all attendees	600 €	
Your lanyard for all attendees	600) €

⁽¹⁾ The book of conference will be given to all the attendees

PROGRAMME

08:30	Attendees registration
09:00	Introduction : Modern Efficient Automotive Powertrains – Overview of NVH challenges Léon Gavric, PSA Peugeot Citroën
	SESSION 1 Powertrain torsional vibrations and related NVH issues Jean Gratadour, SIA
09:20	Challenges and solutions to improve engine start/stop comfort Christoph Steffens, FEV
09:50	Engine down-sizing and down-speeding: a new challenge for torsional vibration filtration Hervé Mahé, Valeo
10:20	Torsional vibration damping in automatic transmissions Matthieu Hiard, PUNCH Powerglide
10:50	COFFEE BREAK
	SESSION 2
	Hybridization technologies and new engines architectures Charles Zhang, Renault
11:20	NVH of Hybrid Vehicles – Key Challenges and Conceptual Approaches Stephan Brandl, AVL
11:50	Hybrid Air Technology and (some) NVH issue Laurent Gagliardini, PSA Peugeot Citroën
12:20	MCE-5 VCRi demo engine NVH preliminary analysis François Besson, MCE-5 Développement
12:50	LUNCH BREAK
12:50	SESSION 3
12:50	
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USEFUL INFORMATION





4, avenue de Bois-Préau 92852 Rueil-Malmaison Cedex, France Tel: +33 1 47 52 60 00



> HOW TO GET THERE

By car

From Paris, exit Porte Maillot, D913 direction La Défense - Saint-Germain-en-Laye

By public transportation

RER Line A, direction Saint-Germain-en-Laye, two options (see map):

- get off at Rueil-Malmaison, take bus 244*, get off at Geneviève Couturier, or bus 27, get off at Bois-Préau. You can also use lines 144 and 467, get off at Rueil-Ville;
- get off at Grande Arche de la Défense, take bus 258 (direction La Jonchère or Saint-Germain-en-Laye), get off at Bois-Préau.
- * In the event of roadworks or if the bus is not following its usual route, ask the driver whether it stops at Geneviève Couturier. If it does not, get off at Rueil-Ville.

HOTEL ACCOMMODATION

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147 Boulevard National 92500 Rueil-Malmaison Tel: 08 92 68 12 78

HOTEL DES ARTS**

3 boulevard du Marechal Joffre 92500 Rueil-Malmaison Tel: 01 47 52 15 00

INTER-HOTEL RUEIL CENTRE***

1 place Richelieu 92500 Rueil-Malmaison Tel: 01 47 08 20 20

IBIS HOTEL***

16 boulevard de l'hôpital Stell 92500 Rueil-Malmaison Tel: 01 47 32 96 96

REGISTRATION FORM

One-day conference NVH Challenges of Modern Efficient Automotive Powertrains - October 22nd, 2015 Réf: 2015-07

PLEASE COMPLETE AND RETURN THIS FORM TO:

SIA - 79, rue Jean-Jacques Rousseau - F-92158 Suresnes Cedex / Fax: +33 (0)1 41 44 93 79 / pauline.senis@sia.fr

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REGISTRATION CONDITIONS

- Registration fees include participation in the conference, proceedings, book of abstracts, refreshment breaks and lunches.

 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 September 22nd 2015, 30% of the registration fees will be retained. After this date, the entire registration fee will be retained. Registered participants not
- able to attend may nominate a substitute. Written notice must be provided.





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