



International Conference and Exhibition

MECHATRONICS FOR VEHICLES AND PRODUCTION

June 24 & 25, 2009

Cité Internationale Universitaire de Paris
Paris, France



in collaboration with

mov'eo



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Context and Objectives

Mechatronics has been defined as “approach aiming at the synergistic integration of mechanics, electronics, control theory, and computer science within the product design and manufacturing, in order to improve and/or optimize its functionality”

(cf NF E 01-010), reliability, compactness and cost. Such a breakdown impacts:

- Development tools,
- Technologies
- And management of development teams.

The conference intends to offer a forum of discussion between many actors coming from different fields:

- The industrial field concerned by product development and manufacturing, including all actors in the supply chain,
- The industrial field of software tool editors, very much impacted by the mechatronics revolution,
- Academic laboratories and Institutes and Education entities.

This 7th edition of EMM will focus on the automotive industry (vehicles and production) but, as usual, best practices in other domains will be presented. The Automotive market is the one which offers great opportunities for mechatronics, and which is going drive it to a high degree of maturity. As for previous editions, the transversal principle of EMM assures a 360° treatment which, beyond car industry, will cover the various areas of ground transportation and mechatronics applications on automotive production systems. From mechatronic CAD to quality control, from sensors to mechatronic systems, from research organizations to purchasing strategies, the selected papers will offer a remarkable European benchmark, in a fast moving world.

Organizing committee

Denis BARBIER - Valeo

Alain BOUSCAYROL - Université L2EP Lille

Christophe COLETTE - Rhône-Alpes Automotive Cluster

Gérard COQUERY - INRETS

Pierre-Richard DAHOO - UVSQ

Laurent DECHESNE - CRITT MECA

Isabelle DUFOUR - Université IMS Bordeaux

Olivier DE GABRIELLI - Thésame

Laurent GERBAUD - Gzelab

Alain GUILLARD - ARTEMA

Franck GUILLEMARD - PSA

Emmanuel DE LAUZON - CETIM

Jochen LANGHEIM - STMicroelectronics

Stéphane LEFEBVRE - Université SATIE/SPEE Labs.

Hervé LENON - SNR

Dominique LHOTELLIER - Renault

Claude MARCHAND - SUPELEC

Daniel MARSON - Dassault Systèmes

Jean-Yves MARTEAU - PSA

Gerard-Marie MARTIN - Valeo

Bélahcène MAZARI - IRSEEM

Rodica MAYET - SPL Mecatronic Seine Amont

André MONTAUD - Thésame

Hervé MOREL - CNRS / GdR SEEDS

Adel RAZEK - CNRS / EPJ AP, LGEP/SPEE Labs

Michel ROZE - Phénix

Sponsors



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■ June 24, 2009 ■

- 09:00 Participants registration
- 09:00 Opening session
- 09:30 Bernard ACCOYER - *President of the French Assemblée Nationale*
Jacques LACAMBRE - *President of the French Automotive Cluster Mov'eo*
Eric MOLEUX - *President of the French Cluster Arve-Industries • EMT*
Jean TOURNOUX - *President of French Mechatronic Industries Association • SKF*

Session 1 : Winning Strategies and Management For Success Stories

René NANTUA - *Arve-Industries Competitive Cluster, Vice President of Thésame*

- 10:15 **Keynote**
Mechatronics : the viewpoint from a leading automotive supplier
G. DEVAUCHELLE - R&D Manager Valeo, France
- 10:45 **Exhibition and posters area Visit / Refreshment Break**
- 11:15 Mechatronics at Bosch Rexroth, the convergence of worlds
P. LAURIN - Bosch Rexroth, Germany
- 11:45 Energy saving in car industry and production
R. PARISOT, O. JOUBERT - SKF, France
- 12:15 Reducing CO₂ emissions via a novel and innovative mechatronic exterior rearview mirror solution
M. GÄRTNER - STMicroelectronics, Germany
M. SCHILLER - Flabeg, Germany
- 12:45 **Exhibition and posters area Visit / Lunch**

Session 2 : Technologies For Mechatronics

Dominique LHOTELLIER - *Renault*

- 14:30 **Keynote**
Innovative applications and controls for active composite material
H. DROBEZ, F. LAURENT - CETIM-CERMAT, France
J-M. FREYBURGER, G. L'HOSTIS, B. DURAND, A. COLLAINÉ - LPMT, France
- 15:00 LIN mechatronics applied to HVAC expansion valves
B. DE COCK - On Semiconductor, Belgium
- 15:30 Transmission chain for series-parallel hybrid vehicle: sizing and simulation using electric actuators
R. SEHAB, B. BARBEDETTE, G. FELD, N. RIZOUG - ESTACA, France
- 16:00 Small impact drive motors based on amplified piezoelectric actuators
C. BELLY, F. CLAEYSSEN, T. PORCHEZ, R. LE LETTY, C. BENOIT - Cedrat Technologies, France
- 16:30 **Exhibition and posters area Visit / Refreshment Break**
- 17:00 On the simulation and control of a gasoline direct injection pump
J. M. BORG, K. TOKUO - Hitachi, Germany
- 17:30 Design and characterization of a scaled-down magneto-rheological damper for automotive suspensions
H. SLEIMAN, J. LOZADA - CEA - LIST, France
S. CLENET, B. SEMAIL - L2EP, France
- 18:00 MR-Drive: a new 1-Degree of Freedom magneto-rheological fluid based haptic interface
F. PERIQUET, J. LOZADA, S. ROSELIER, R. POLIZZI, M. ANASTASSOVA, M. HAFEZ - CEA - LIST, France
- 18:30 **Cocktail and networking party**

The organisers reserve the right to make changes to the programme.

■ June 25, 2009 ■

08:00 *Participants registration*

Session 3 : Tools For Mechatronics Life Cycle Processes And Development

Vincent LEBUGLE - Journalist specialised in software tools for industry

08:30 **Keynote**

Modeling guidelines and tools comparison for electromechanical system design in automotive applications

G. REMY, C. MARCHAND, P. LEFRANC – LGEP /SPEE-Labs, CNRS

09:00 Mechatronics role in PLM strategies

E. MILLER – CIMdata, USA

09:30 A model based design compliant framework for mechatronics systems development

D. LAROUDIE – Geensys, France

10:00 Involving AUTOSAR rules for mechatronics systems design

P. GOURIET – PSA Peugeot Citroen, France

10:30 *Exhibition and posters area Visit / Refreshment Break*

11:00 Multiphysics simulation of mechatronic systems with finite elements

J-L. BLANCHARD – Valeo, France

11:30 Mechatronic modelling of a flexible robot with SAMCEF

P. ANDRY, M. BRUYNEEL, F. D'AMBROSIO, P. PASQUET – SAMTECH, Belgium

12:00 A knowledge based system for mechatronics extended with ontological level

R. BEN MOSBAH, S. DOURLENS, N. LEVY, A. RAMANE-CHERIF, A. SOUKANE – Université de Versailles, France

12:30 *Exhibition and posters area Visit / Lunch*

Session 4 : Testing and Qualifying For Safety And Reliability

Emmanuel DE LAUZON - CETIM

14:00 Simulation, modelling and testing of a load sensor bearing

F. GUERRE-CHALEY - SNR Roulements

14:30 Reliability Growth for Mechatronic modules

O. BRUNEL – Electricfil Automotive, France

15:00 Qualifying Mechatronic Devices for use in High Temperature and High Vibration Environments

A. LOVE – Honeywell Turbo Technologies, France

15:30 *Round table on design process, methodologies, tools and standardization for mechatronics*

Emmanuel DE LAUZON – CETIM

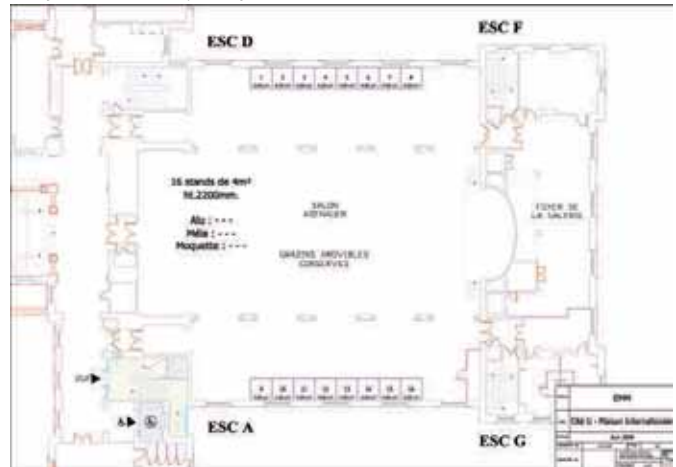
16:00 *Exhibition and posters area Visit*

17:00 End of conference

The organisers reserve the right to make changes to the programme.

Exhibition

The congress will be accompanied by an exhibition where companies will be able to present information to the participants, highlight their new products and create new privileged contacts within this unique gathering of targeted decision-makers. This offer is limited, and it is highly recommended to book your space as early as possible.



4 m² fitted-out booth:

Including:

- 1 table + 2 chairs + 1 display rack, 1.5 kW power strip
- Conference registration for 1 person (access to the conference room, proceedings, breaks, lunches and cocktail)

970 € ex VAT (1160, 12€ VAT Incl)

8 m² fitted-out booth:

1815 € ex VAT (2170, 74 € VAT Incl)

To order any other items, such as audiovisual equipment, furniture and extra fittings, please refer to our supplier:

INTERNATIONAL MODULING – 3 rue Messy – F-77410 CHARNY

Tel: +33 (0)1 60 61 00 44 - Fax: +33 (0)1 60 61 07 70 - Email: location@international-moduling.com

Useful information:

Cité Internationale Universitaire de Paris, Maison Internationale, Espace ADENAUER.

Venue : Cité Internationale Universitaire de Paris, France www.ciup.fr

Construction: Tuesday June 23, 2009 from 2 pm to 6 pm

Exhibition: From Wednesday June 24 (9 am) to Thursday June 25 (5 pm)

Dismantling: Thursday June 25, at the end of the conference (after 5 pm)

Sponsoring and Advertising

You have also the possibility to 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 this sponsorship opportunity.

Do not miss the opportunity to advertise in the congress documents: a portal to leading decision-makers in the automotive industry.

For further information on exhibition and sponsoring opportunities,

Please contact

Emilie BONNET

Tel: +33 (0)1 41 44 93 75

Email: emilie.bonnet@sia.fr

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Registration Form

June 24 & 25, 2009 • CIUP - Paris, France • Ref: 2009-05

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.emm2009.eu

Please use BLOCK CAPITALS when filling in this form

Mrs Ms Mr

Family Name: First Name:
Company: Department:
Position:
Address:
Postcode: City: Country:
Tel: Fax:
Email:
VAT number:

Registration fees (Tick as appropriate)

- 1 028.56 € VAT Incl. (860 € VAT Excl.) SIA Members
- 1 160.12 € VAT Incl. (970 € VAT Excl.) Non Members
- 460.46 € VAT Incl. (385 € VAT Excl.) Researchers and laboratories
- 580.06 € VAT Incl. (485 € VAT Excl.) Thesame and Artema Members and small and medium-sized firms (under 100 employees)
- FREE Speakers (1 per conference), Session Chairmen
Preferential rates for students, group and retired – For further information, contact us
- FREE Exhibitor (1 per booth)

Payment

- 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 attach a copy)
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I hereby authorise the organisers to charge my credit card to the amount of €
On my Card n°: Expiration date:/.....
3 digit CVV or CVC number (on back of credit card): ____ Cardholder’s name:

Date

Date and signature: _____

Company stamp: _____

REGISTRATION CONDITIONS

- Registration fees include participation in the conference, CD of proceedings, book of abstracts, refreshment breaks, lunches and cocktail.
- 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 symposium, we regret that you will not be allowed entry to the symposium.
- When we have received the registration form, we will send you a confirmation letter and an invoice. Please indicate the accounts department address where necessary.
- In case of cancellation before June 5, 2009, 30% of the registration fees will be retained by the organisers. 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

General Informations

You will find all up-to-date information on

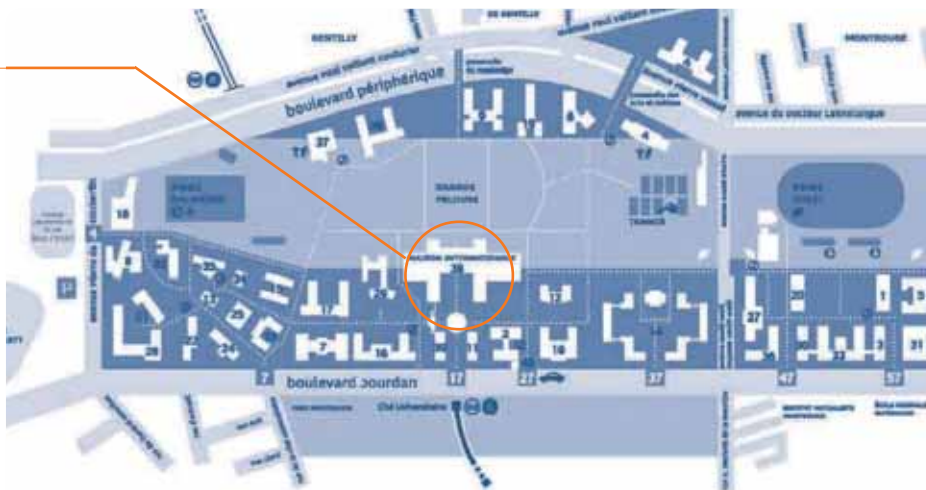
www.emm2009.eu

Official language : English

■ Venue / Access



CITÉ INTERNATIONALE UNIVERSITAIRE DE PARIS
17, bd. JOURDAN
75014 Paris
Accueil : 01 44 16 64 00



■ Public transports

- RER B : stop at « Cité universitaire »
(15 minutes from Paris City Center) ,
- Tramway T3 : Cité universitaire station
- Métro ligne 4 : Porte d'Orléans station
- Bus (21, 67 et 88).



■ By car

- Take the « Périphérique Sud » (South Périphérique)
Get off at « Porte d'Orléans or Porte de Gentilly
Car parks :
- Parking Saemes Charlety Coubertin
17 avenue Pierre de Coubertin - 75013 PARIS - (400 m from conference place) or :
- Parking Saemes Porte d'Orléans
1 rue de la Légion Etrangère - 75014 PARIS - (1300 m from conference place)



■ Hotel Accommodation

- We have selected a list of the most convenient hotels situated near the CIUP . Delegates are encouraged to make their own hotel reservations early, directly with the hotels of their choice

Hotexco Hotel Ibis

13 r Val de Marne
94250 GENTILLY
Tel: +33 (0)1 49 69 94 94

Etap Hôtel

15 bd Romain Rolland
92120 MONTRouGE
Tel: +33 (0) 8 92 68 05 39

Novotel Porte d'Orléans

Novotel Porte d'Orléans
15 bd Romain Rolland
92120 MONTRouGE
Tel: +33 (0) 1 41 17 26 00

Ibis

33 r Barbès
92120 MONTRouGE
Tel: +33 (0) 1 42 31 67 00

Mercure Paris Porte d'Orléans

13 r François Ory
92120 MONTRouGE
Tel: +33 (0)1 58 07 11 11
Mail : ho374@accor.com

Ibis

177 r Tolbiac
75013 PARIS
Tel: +33 (0) 1 45 80 16 60

For further information on Paris
www.parisinfo.com

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