



INTERNATIONAL CONFERENCE



EMM 2009, 7th EUROPEAN MECHATRONICS MEETING :

MECHATRONICS FOR VEHICLES AND PRODUCTION

June 24 & 25, 2009
CIUP, Paris, France

2nd CALL FOR PAPERS
Deadline for papers submission:
March 10th, 2009



Moving forward together
Progressons ensemble



Overview 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 practises 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 Committe

Denis BARBIER - Valeo

Alain BOUSCAYROL - Université LzEP Lille

Christophe COLETTE - Rhône-Alpes Automotive Cluster

Gérard COQUERY - INRETS

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André MONTAUD - Thésame

Hervé MOREL - CNRS /GdR SEEDS

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

Michel ROZE - Phénix

■ Topics to be addressed

■ EMM 2008 will focus on most relevant mechatronics topics and best practices in a cross-sectoral view.

A • Tools for mechatronics life cycle processes and development

Evolution is required towards tools that can combine mechanics CAD, electronics CAD, electronics part management, etc ... including also software blocs management, as well as requirement management.

- 1 - Design methodologies
- 2 - Tools for PLM
- 3 - Modelling and simulation (system and multi-physical modelling)
- 4 - Virtual prototyping and testing
- 5 - Digital manufacturing
- 6 - Quality control and Quality management

B • Technologies for mechatronics

Three main subjects of major interest:

- 1 - Monitoring and control of actuators, machines, robots, systems
 - Robust and advanced control (other possible key words: estimation and identification techniques, non-linear control systems, industrial applications of neural networks, fuzzy algorithms, evolutionary computing)
 - Power management
- 2 - Technologies for embedding electronics in mechanics
 - Mechatronic packaging, multi-functional packaging, 3D packaging
 - Innovative and smart materials, mechanics
 - Cooling management, 3D cooling systems, new heat transfer systems and exchangers
 - ...
- 3 - Applications
 - Mechatronics for electric and hybrid cars
 - Smart power for sensors and actuators
 - Micro-devices and smart sensors
 - Smart actuators

C • Organisation and management changes driven by the new processes induced by mechatronics development management

- 1 - Team management and organisation
- 2 - Education and skills
- 3 - Cross-cultural challenges
- 4 - Standards

D • Success stories in mechatronics products

Papers will present industrial achievements, mainly in the fields of automotive and transport sectors, machines tools industry, power transmission components, industrial machinery for construction or manufacturing, on these different items:

- Innovation and technological breakthroughs: sensors integration, embedded software, mechatronics products under harsh environmental conditions...
- Organisation implemented to manage teams project interdisciplinary, new relationships with suppliers and customers, products developments with universities, ...
- Communication strategy on mechatronics products and services,

General Information

www.emm2009.eu

Some of the papers might be selected to be published in the “Ingénieur de l’Automobile”, in the European Power Electronics and Drives Magazine and in European Physical Journal (Applied Physics : EPJ AP).



Abstracts should be addressed in a digital format (Word or PDF file) to:

SIA / Emilie BONNET

Tel: +33 (0)1 41 44 93 75 – email: emilie.bonnet@sia.fr

■ Deadlines:

- Proposals for papers must reach us by **March 10th, 2009**
- The list of papers will be selected by the organizing and programme committees. The authors will be notified accordingly by **March 27th, 2009**
- The authors selected must submit a text of one page for inclusion in conference proceedings by **May 18th, 2009**

■ Your proposal should include:

- The title of your paper
- Information about the author(s)
(*title, full name, position, company, address, department, telephone and fax numbers, e-mail address, together with brief biographical details*) **PLEASE INDICATE CLEARLY THE LEAD AUTHOR (SPEAKER)**
- The conference topic addressed by your proposal
- A summary of no less than 30 lines. It should be sent to us in digital format (Word or PDF).

■ Additional information:

- Official language : English (no simultaneous translation)
- Speakers will be allocated 30 minutes each (20 minutes for presentation and 10 minutes for questions).
- All necessary instructions for the preparation of the paper will be sent to the authors after selection.
- The lead author (one per paper) will benefit from a discount on the conference attendance fee.

■ exhibition, sponsorship and advertisement

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. The exhibition will be a focal point, attracting professionals, research institutes and engineers from the electronic and the automotive industries. This offer is limited, and it is highly recommended to book your space as early as possible.

4 m² fitted-out booth: 970 € ex VAT

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)

To order any other items, such as audiovisual equipment, furniture and extra fittings, please contact us.

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

Exhibition: From Wednesday June 24 (8 am) to Thursday June 25 (10 pm)

Dismantling: Thursday June 25, at the end of the conference (after 1 pm)

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.

Your contact

Emilie BONNET

emilie.bonnet@sia.fr – Tel: +33 (0)1 41 44 93 75