



3-5 February 2010
GRIMALDI FORUM, MONACO
www.imagina.mc

Organized by **imagina** with the support of MICADO

CALL FOR PAPERS

Each session will present "market applications and trends" and "R/D projects and product solutions" oriented papers. Speakers will be selected via a "Call for Papers".

CONFERENCE PROGRAMME

Session 1

Digital Mock-Up and Simulation Wednesday 3 February

Initially devoted to design office, the digital mock-up spread out the various domains of the products development cycles from design to their commercialization. That capitalization source of innovation and performance for the whole set of industrial sectors is nevertheless not as natural as we could imagine. How to exploit that "metadata" initially elaborated for a specific need? What are the new requirements in the definition and exploitation of that "entity" due to the domains re-definition, its new « exploiting populations », and the enterprise scope (worldwide market)? What are the limitations and the experience feedback from the users in the exploitation of the digital mock-up?

The technologies devoted to simulation and virtual reality contribute in completing the conventional ways carried out in the development cycle and the products exploitation. Nonetheless, more than a complement, they represent in certain cases a revolution and/or an alternative by opening areas for experimentation or usages not feasible before: virtual show room, augmented reality, factory of future, training applied to rare procedures, ... On the basis of solid cases, the return on investment, the benefits as well as the prospective application domains or applicative in the various activity fields of industry shall be addressed.

MultiModal platform for virtual aerospace and transportation design : state of the art, case studies & perspectives

The progress in haptics combined with 3D visualizations opens unprecedented perspectives in functional synergies in virtual reality with an objective: the assistance of human senses into decision process. What do our eyes, fingers and muscles, haptic sensors, realistic rendering and numerical simulations possibly remote mutualizable, in real time, enable to discover and explore.

This year we will also address Simulation and 3D context rendering of Industrial complex systems, plant and processes, like: Plant transparency and Operations Process Management, 3D industrial storyboard scenarios, Interactive virtual process and 3D Manufacturing Execution Systems.

Session 2

Style and 3D Design Thursday 4 February (morning)

A review of engineering and visualisation – from sketches showing early style ideas to finished products.

In an increasingly fragmented, dynamic and competitive market, each new model of a product must ultimately attract clients, especially when the product in question is designed for 'leisure' or 'functional' uses. From drawings showing early style ideas to creating finished products, manufacturing processes must take into account the techno-industrial constraints imposed by considerations of cost, quality, time and quantity while recognising the key aim of creating an attractive and functional product that exists to fulfil a specific purpose. What feedback is available to those creating a new style for a highly technological and strategically complex product? How can the twin constraints of style and design be reconciled?

Session 3

Virtual prototyping Thursday 4 February (afternoon)

Physical prototypes still have to be used in designing products, notably in checking the functions, parts and equipment. The widespread use of digital mock-ups and the development of associated simulation technologies has, however, opened up new, increasingly important, uses for virtual prototyping:

- helping decision making: comparative presentations allow different materials or styles to be assessed across a range of environments.
- helping product design by facilitating communication between designers, suppliers and clients, often fitting the changing needs of business communities.
- enabling product testing through live-action tests that incorporate future users.

More economical than their physical counterparts, virtual prototypes strengthen the collaborative and participative processes that are part of every stage of industry projects. They contribute to cost reduction and can limit development cycles while maximising potential for a finished product of superior quality.

What issues do we face when using virtual prototypes? What benefits do they bring us? What are their limits and what constraints do they impose on us? How can concrete examples show the ways in which virtual prototyping can be integrated into industry processes?

Which products or design solutions require the use of virtual prototypes?

SPEAKER SELECTION PROCEDURE

SUBMISSION OF PAPERS

- ▶ Presenters must submit their papers via the **imagina** website (www.imagina.mc/cfp)
- ▶ Notification of preliminary acceptance will be made on the basis of the paper abstract
- ▶ Selected presenters for speaking slots will register to **imagina** with a special registration fee of 200 Euros (+ VAT) which includes full access to all **imagina** conferences, exhibition hall, wifi, the shuttle service from and to Nice Airport (provided within the shuttle service opening hours), lunches taken at **imagina**, and the publication of the speaker's presentation on the **imagina** website.
- ▶ All industry conferences will be in English with no translation

GUIDELINES ON THE PAPER CONTENT

- ▶ Include the abstract for a 15 minutes presentation applied to one of the three topics:
 1. Digital Mock-Up and Simulation
 2. Style and 3D Design
 3. Virtual prototyping
- ▶ Innovation and creativity highlighting 3D technologies will be taken into account in the selection process
- ▶ Present why the Committee should accept the paper and what the audience will learn
- ▶ Presentations will have to highlight the value of 3D in a "market applications and trends" or "R/D projects and product solutions" mindset

DEADLINES TO REMEMBER

- ▶ Abstract submission: **October 31, 2009**
- ▶ Acceptance notification: **November 16, 2009**

PROGRAMME COMMITTEE

- ▶ **Professor Yvon Gardan**, Professor of University, DINCCS Director (Micado Technical center)
- ▶ **Laurent Puons**, General Manager, **imagina**
- ▶ **Victor Waknine**, Senior Consultant Strategy & Development, Mozart Consulting

The final selection of presentations for the Conference programme will be decided by the **imagina** 2010 Programme Committee.

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