

# Digital Olfaction Society

2<sup>nd</sup> World Congress on

## Olfaction & Issues



**Olfaction & Issues 2016**  
**May 23-24 - Milano, Italy**

**May 23-24, 2016**

**Politecnico di Milano - Milano, Italy**

**Scientific Agenda & Abstracts Book**



[www.digital-olfaction.com](http://www.digital-olfaction.com)

## 2<sup>nd</sup> World Congress on

# *Olfaction & Issues*

## Sciences, Marketing & Perspectives

May 23-24, 2016 – Politecnico di Milano, Milano, Italy

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After the success of previous congresses in Paris 2010, Berlin 2013, and Tokyo 2014, the scientific committee of the digital olfaction society decided to organize two new congresses in 2016:

*Olfaction & Issues 2016: Science, Marketing & Perspectives - Milano, Italy May 23-24, 2016*

*DOS World Congress 2016 - Tokyo, Japan – December 5-6, 2016*

### **Olfaction & Issues 2016: Science, Marketing & Perspectives**

Odors are an important part of our lives. They are associated with events, experiences, people, places, materials and objects, with nature, with food, and illness. Odors arouse our emotions and are related to our anxieties, fears, ecstasies and memories.

We can envision scenarios where odors can play primary and even unexplored roles. Odors can be imagined, created and designed. We can use them to create a unique imprint to places, situations and things. Odors can romanticize reality and evoke association between the invisible and physical realm.

The manipulation of olfaction can introduce substantial advantages in design and marketing if we integrate odors in appropriate and ingenious ways. The design and marketing of odors is not only associated with perfumes, but also with other items that are typically odorless, such as buildings and places. It is possible to create odors that induce memorable emotions in users.

We can accomplish this if we govern and simulate the entire process of production, perception, and evolution of olfactory communication and messages, which must be consolidated with the other sensory receptors.

During the conference, the scientific committee will highlight the role of olfaction in many practical applications related to marketing, health, and well-being.

### **Olfaction & Issues 2016 will highlight three strategic topics:**

The first session will be dedicated to the sciences and the scientific committee will highlight the recent scientific advances in the olfaction field.

The second session will be dedicated to the marketing of olfaction – Olfaction & Marketing: towards a personalized emotional perspective.

The third session will be dedicated to all the perspectives and innovations related to the olfaction.

The conference aims at gathering international researchers and academics, and industries and stakeholders engaged in the fields related to olfaction and digital olfaction to discuss issues about future applications of olfaction, the impact of these applications on society, the economy, and lifestyle.

We look forward to welcoming you in Milano & Tokyo for these events.

### **Monica Bordegoni**

Co-Chairperson of Scientific Committee & Local Organizing Committee

### **Marvin Edeas**

Chairman of the Digital Olfaction Society Committee & Co-Chairman of Scientific Committee

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*Olfaction & Issues*

**Sciences, Marketing & Perspectives**

May 23-24, 2016 – Politecnico di Milano, Italy

**Scientific & Demonstrations Agenda**

*Day 1 - May 23, 2016*

7h30 Welcoming of attendees

8h55 Opening Ceremony by Pr Monica Bordegoni & Pr Marvin Edeas

**Session 1: Olfaction 2016:  
Recent Scientific Advances & Perspectives**

9h00 **Olfaction and olfactory receptors: recent advances & perspectives**  
*Marvin Edeas, Founder & Chairman of the Digital Olfaction Society Committee, France*

9h30 **The Sense of Smell in Health and Disease**  
*Richard Doty, University of Pennsylvania, USA*

9h45 **Exploit odours in product design for eliciting positive emotional experience**  
*Monica Bordegoni, Politecnico di Milano, Italy*

10h15 Discussion

10h30 Coffee Break

**Session 2: Olfaction & Marketing:  
Towards a personalized emotional perspective**

11h00 **How the incorporation of scents could enhance the immersive virtual experience?**  
*Sylvain Delplanque, CISA – University of Geneva, Switzerland*

11h30 **How odor contexts influence the perception of facial expressions of emotions: a developmental perspective**  
*Arnaud Leleu, Centre des Sciences du Goût et de l'Alimentation, INRA–Université Bourgogne-Franche-Comté, Dijon, France*

12h00 **Exploration into Olfaction and Experiential Strategy: State of Art**  
*Djamchid Assadi, Groupe ESC Dijon-Bourgogne, Dijon, France*

12h30 Lunch Break

14h00 **Odors affect aversion to losses during decision making**  
*Andrej Stancak, University of Liverpool, United Kingdom*

14h30 **Innovation for Olfactory applications: the Solid Fragrance Release Technology**  
*Stefano Bader, Oikos Fragrances, Italy*

15h00 Discussion

15h30 Lunch Break

- 16h00 Molecular determinants of olfactory habituation**  
*Damien O'Halloran, George Washington University, USA*
- 16h15 Odors at the coherence of the senses in artistic experiences**  
*Laurence Claudine Fanuel, Ino-Sens, Keva, France*
- 16h30 Studying odors in a marketing perspective: an experimental research applying neuroscientific techniques**  
*Vincenzo Russo, IULM University of Milan, Italy*
- 16h45 The future smells bright: the effect of fragrance on episodic future thinking**  
*Kristopher George Lundy Magee, University of Bristol, United Kingdom*
- 17h00 Olfactory art: scent context is the new thinking**  
**When scent creates sciences and social involvement by context**  
*Peter de Cupere, College University PXL, Belgium*
- 17h15 Assessment of Zeolites X and Y as Antimicrobial Fragrance Carriers**  
*Nurcan Bac, Yeditepe University, İstanbul, Turkey*
- 17h30 End of first day**
- 20h00 Olfaction & Issues Dinner**  
*If you are interested to participate to this dinner, please register online.*

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## *Day 2 - May 24, 2016*

- 8h30 Welcoming of attendees**
- 9h00 Sexing up the human pheromone story: How a scientific myth was started**  
*Tristram Wyatt, Department of Zoology, University of Oxford, United Kingdom*
- 9h30 Imaging a smell**  
*Thierry Livache, CEA, France*
- 9h45 Creaspher: A new green technology developed for long-lasting release**  
*Adeline Callet, Creathes, France*
- 10h00 Discussion**

10h15 Coffee Break

### **Olfaction & Issues Displaying & Demonstrations in the field of marketing**

*Before the practical demonstration, we invite each team to present orally their technology and the process of demonstration (10 minutes by team).*

*During Demonstrations Session, each team will have a dedicated space to show, demonstrate, explain and discuss about his project.*

- 10h45 Visual-olfactory interaction with virtual objects**  
*Mario Covarrubias, Politecnico di Milano, Italy*
- 10h55 Consumer product and Odours to assess customers' preferences**  
*Marina Carulli, Politecnico di Milano, Italy*
- 11h05 The Perfumed book**  
*Weibin Ding, Politecnico di Milano, Italy*

- 11h15 Smell objects in a virtual home**  
*Marina Carulli, Politecnico di Milano, Italy*
- 11h25 Olfactory stimuli in car driving**  
*Yuan Shi, Politecnico di Milano, Italy*
- 11h35 Wearable Olfactory Display**  
*Weibin Ding, Politecnico di Milano, Italy*
- 11h45 Sensorics International and Modern Olfactometry**  
*Kyra Milnamow, Sensorics, USA*
- 11h55 Demonstration session**

12h45 Lunch Break around the demonstrations area

- 14h00 Demonstration session**
- 15h00 Discussion & Concluding Remarks**
- 15h30 Olfaction & Issues Awards 2016:**
- *Scientific Contribution Award*
  - *Demonstration Award*
- 16h00 End of Olfaction & Issues 2016**

## **Olfaction & Issues Communications**

**Development of an Unencumbered Wearable Olfactory Display**  
**Weibin Ding**, Politecnico di Milano, Italy

**Key food odorant profiles for broadly tuned odorant receptors**  
**Christiane Geithe**, Leibniz Institut, Germany

**Olfactory stimulation as an element of environmental enrichment preventing mental disorders in animals**  
**Maria Agata Kokocińska**, Polish Academy of Sciences, Poland

**Olfactory dysfunction as potential biomarker in neurodegenerative disorders**  
**Carla Masala**, University of Cagliari, Italy

**Key food odorant profile for a narrowly tuned odorant receptor**  
**Franziska Noe**, Leibniz Institut, Germany

**Real time monitoring of the metabolic capacity of ex-vivo rat olfactory mucosa by continuous on-line PTR-MS**  
**Rachel Schoumacker**, INRA Centre des Sciences du Goût et de l'Alimentation, France

# Presentation of the demonstrations selected

## Visual-olfactory interaction with virtual objects

by Mario Covarrubias, Politecnico di Milano, Italy



**Description:** The application allows the user to see objects through a stereoscopic head mounted display, to interact with virtual objects through hand gestures detected by a LeapMotion sensor and to smell odors associated with the objects when grabbed delivered by an Olfactory Display integrated with the display.

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## Consumer product and Odours to assess customers' preferences

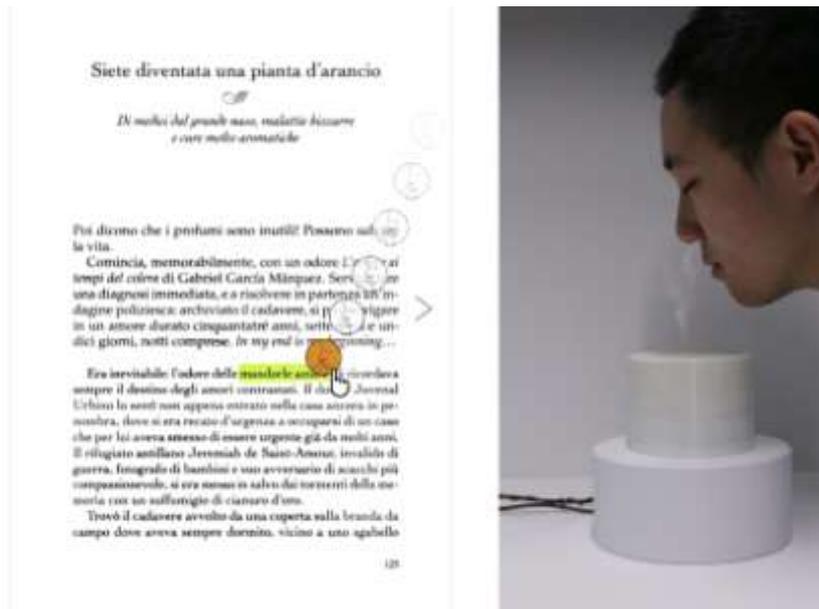
by Marina Carulli, Politecnico di Milano, Italy



Description: The application allows designers to evaluate in which way odors can influence the users' evaluation of products. The application shows some washing machines in a store, and users should tell preferences. The evaluation is performed with and without odours.

## The Perfumed book

by Weibin Ding, Politecnico di Milano, Italy



**Description:** The application allows the user to read a chapter of a book telling stories about odors, and smell some of the odors mentioned in the story.

## Smell objects in a virtual home

by Marina Carulli, Politecnico di Milano, Italy



**Description:** The application allows users to walk around in a virtual home. When you do certain actions or encounter some objects, they emit an odor. For example, if one opens the door of the washing machine she can smell the odor of clean cloths.

**Olfactory stimuli in car driving**  
*by Yuan Shi, Politecnico di Milano, Italy*



**Description:** The application shows how olfactory stimuli can be used to influence the cognitive aspect of drivers. The study is performed using a driving simulator in the I.DRIVE Lab ([idrive.polimi.it](http://idrive.polimi.it)).

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**Wearable Olfactory Display**  
*by Weibin Ding, Politecnico di Milano, Italy*



**Description:** This device is a wearable Olfactory Display, tiny and comfortable to wear, which can deliver 4 different odors, and can be connected to a wireless app for mobile applications.