



# **3<sup>rd</sup> World Congress of Digital Olfaction Society**

**December 7-8, 2016**

**AP Tokyo Yaesu Dori  
Convention Center**

**Tokyo, Japan**

**Scientific & Demonstrations Agenda**

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

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## Scientific & Demonstrations Agenda

### Day 1 – December 7, 2016

8h00 Welcoming & Registration of Attendees

9h00 Welcome Introduction - DOS 2016: What do we need to highlight?  
*Digital Olfaction Society Chairpersons*

#### Session 1: Recent Advances of Digital Olfaction Research & Development

9h10 Recent advances in human olfactory interface  
*Takamichi Nakamoto, Tokyo Institute of Technology, Department of Physical Electronics, Japan*

9h40 Recent advances in human olfactory receptors: impact on health and diseases  
*Marvin Edeas, Chairman of DOS Scientific Committee, France*

10h10 Surface Acoustic Wave (SAW) Biosensors and their Integration with microfluidics towards a flexible array based biosensor system  
*Michael Rapp, Karlsruhe Institute of Technology, Germany*

10h40 Coffee Break & Poster Session

11h10 Receptor representations of odors: digitizing olfaction  
*Joel Mainland, Monell Chemical Senses Center, USA*

11h40 Intelligent sensing and classification using odor sensors  
*Sigeru Omatu, Osaka Institute of Technology, Japan*

12h10 Internet of media things towards surrealistic worlds with 3D scent technology  
*Sang-Kyun Kim, Myongji University, Republic of South Korea*

12h40 Lunch Break & Poster Session

13h45 Exhaled breath analysis for monitoring of lung cancer patients using E-Nose system  
*Hyung-Gi Byun, Kangwon National University, South Korea*

14h15 Urine can be used for detecting patients with active pulmonary tuberculosis by an electronic nose-based artificial neural network  
*Ehab Mohamed, Alexandria University, Egypt*

14h30 Colorimetric sensor arrays based on chemo-response dyes for food odor visualization  
*Xiaobo Zou, School of Food & Biological Engineering, Jiangsu University, China*

14h45 Olfactory rehabilitation system to improve ability to smell using olfactory display  
*Shohei Horiguchi, Keio University, Japan*

15h00 Designing smell-enabled training games: early lessons from the Nosewise project  
*Simon Niedenthal, Malmö University & Stockholm University, Sweden*

15h15 The effect of odor on the perception of space  
*Ryo Wako, University of Tsukuba, Japan*

15h30 The evocative role of olfactory display in a library context  
*Mai Kei Lai, Macao Polytechnic Institute, Macao*

15h45 Coffee Break & Poster Session

#### Session 2: Recent Advances on Odor Sensing (Part I)

16h15 A low-voltage low-power nose-on-a-chip for rapid diagnosis of ventilator-associated pneumonia  
*Kea-Tiong Tang, National Tsing Hua University, Taiwan*

16h45 Odor source localization strategy using multiple sensor nodes in dynamic turbulent environment  
*Muis Muhtadi, Tokyo Institute of Technology, Japan*



- 17h00 **Development of cell-based odor sensor with real time lock-in detection**  
*Yuji Sukekawa, Tokyo Institute of Technology, Japan*
- 17h15 **Study of an odor sensing system based on amperometric sensor combined with preconcentrator using saw device**  
*Parthojit Chakraborty, Tokyo Institute of Technology, Japan*
- 17h30 **End of the first day**
- 20h00 **Digital Olfaction Society Dinner**  
If you are interested to participate, please register online before November 30.
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## Day 2 – December 8, 2016

- 8h55 **Opening of the second day**

### Session 2: Recent Advances on Odor Sensing (Part II)

- 9h00 **Mobile robot with odor sensor: recent applications**  
*Hiroshi Ishida, Tokyo University of Agriculture and Engineering, Japan*
- 9h30 **Surface Acoustic Wave (SAW) sensor system for low cost gas analysis and characterization of biofuels**  
*Michael Rapp, Karlsruhe Institute of Technology, Germany*
- 10h00 **Electronic nose's standing point**  
*Junichi Kita, Shimadzu Corporation, Japan*
- 10h15 **The first digital scent experience room debuts in Hangzhou, China**  
*Lifen Shen, ScentRealm - Hangzhou Marker Information Technology, China*

10h30 *Coffee Break, Poster Session & Demonstration Session*

### Session 3 – Olfactory Display & its Applications

- 11h00 **Wireless E-Nose and smartphone as a personal device for digital olfaction**  
*Jesús Lozano Rogado, Universidad de Extremadura, Spain*
- 11h30 **Towards spatial augmented reality by olfaction: spatio-temporal control of scented air**  
*Yasuyuki Yanagida, Meijo University, Japan*
- 12h00 **Effects of olfaction in multisensory communications**  
*Yutaka Ishibashi, Nagoya Institute of Technology, Japan*
- 12h30 **Enhancing user interaction with olfactory experiences**  
*Monica Bordegoni, Politecnico di Milano, Italy*

13h00 *Lunch Break, Poster Session & Demonstration Session*

### Session 4: Digital Olfaction Displaying & Demonstrations

- 14h00 **General presentation of each demonstration**  
Before the practical demonstration, we invite each team to present orally their technology and the process of demonstration (5-10 minutes by team). During Demonstrations Session, each team will have a dedicated space to show, demonstrate, explain and discuss about its project.
- Cocktail maze using wearable olfactory display**  
*Yosuke Maruno, Masaaki Iseki and Takamichi Nakamoto, Tokyo Institute of Technology, Japan*
- Aromatic, a personal aroma diffuser, changes the way you enjoy scents"**  
*Shuji Fujita, Sony Corporation, Japan*
- Smelling screen mini: Presenting spatial odor distribution over the touch screen of a tablet computer**  
*Haruka Matsukura, Tokyo University of Agriculture and Engineering, Japan*
- Open session around demonstrators**  
You will have the possibility to visit the different demonstration booth, discuss with the demonstrators and test the different devices and methods.
- 17h00 **DOS 2016 Innovation Award**
- 17h30 **End of DOS 2016 World Congress**
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