3rd 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

Scientific & Demonstrations Agenda

Day 1 – December 7, 2016

8h00 **Welcoming & Registration of Attendees**

9h00 **Welcome Note by DOS Chairpersons**

Session 1: Recent Advances of Digital Olfaction Research & Development

Chaired by Takamichi Nakamoto & Michael Rapp

9h05 **Recent advances in human olfactory interface**
Takamichi Nakamoto, Tokyo Institute of Technology, Department of Physical Electronics, Japan

9h35 **Targeting olfactory receptors by digital agonists, aromas or scents: myth or reality?**
Marvin Edeas, Chairman of DOS Scientifc Committee, France

10h05 **Surface Acoustic Wave (SAW) Biosensors and their Integration with microfluidics towards a flexible array based biosensor system**
Michael Rapp, Karlsruhe Institute of Technology, Germany

10h35 Coffee Break & Poster Session

11h05 **Receptor representations of odors: digitizing olfaction**
Joel Mainland, Monell Chemical Senses Center, USA

11h35 **Intelligent sensing and classification using odor sensors**
Sigeru Omatu, Osaka Institute of Technology, Japan

12h05 **Internet of media things towards surrealistic worlds with 3D scent technology**
Sang-Kyun Kim, Myongji Unviersity, Republic of South Korea

12h35 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)

Chaired by Hyung-Gi Byun, Hiroshi Ishida & Yasuyuki Yanagida

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**

Day 2 – December 8, 2016

8h55   **Opening of the second day**

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

Chaired by Hyung-Gi Byun, Hiroshi Ishida & Yasuyuki Yanagida

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**
Amanda Wang, ScentRealm - Hangzhou Marker Information Technology, China

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

Session 3 – Olfactory Display & its Applications

Chaired by Umberto Cugini & Joel Mainland

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

Chaired by Monica Bordegoni

14h00   **General presentation of each demonstration**
Before the practical demonstration, we invite each team to present their technology and the process of demonstration during 5 to 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

         Aromastic, 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.

16h45   **Concluding remarks by Pr Takamichi Nakamoto**

17h00   **Conclusion & end of DOS 2016 World Congress**

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