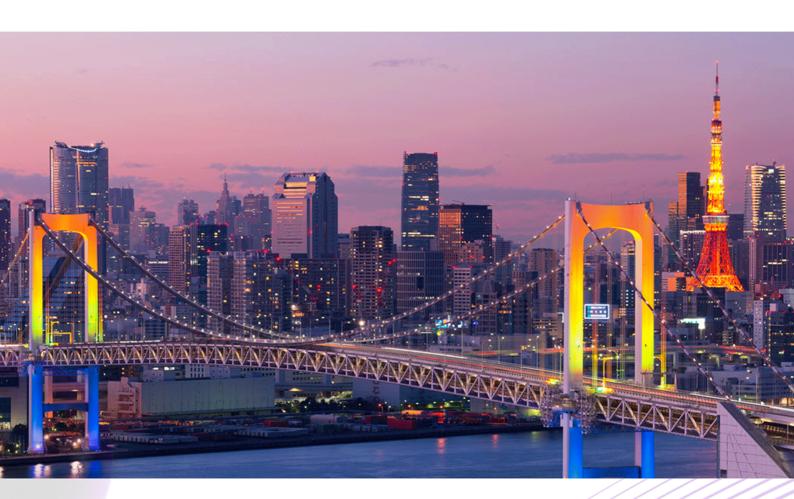# 6ᵗʰ World Congress of

DIGITAL OLFACTION SOCIETY

第6回デジタルオルファクション国際会議

FINAL AGENDA

会議事項

December 3 - 4, 2018 - Tokyo, Japan

Digital Olfaction Society

6th DOS Annual Meeting

December 3-4, 2018 – Tokyo, Japan

Day 1 – December 3, 2018

7h30   **Welcoming of attendees**

8h55   **Opening Ceremony**

Session 1: Olfaction 2018: Recent Scientific Advances & Perspectives
The Sense of Smell in Health

Chairpersons: Marvin Edeas, Andreas Keller

9h00   **Olfaction and Digital Olfaction: Now & Tomorrow**
Marvin Edeas, Université Paris Descartes, INSERM 1016,
Chairman of the Digital Olfaction Society Committee

9h30   **The structure of olfactory appearances**
Andreas Keller, Rockefeller University, USA

10h00   **Smell loss: a marker of cognitive decline, dementia, and mortality**
Maria Larsson, Stockholm University, Sweden

10h30 Coffee Break & Network Session

11h00   **A non-invasive measure of olfactory bulb function in humans**
Johan Lundström, Department of Clinical Neuroscience, Karolinska Institute, Sweden

11h30   **Perceptual functions of the mouse olfactory bulb**
Lawrence Cohen, Yale University, USA

11h45   **The olfactory system in genesis of Alzheimer's disease**
Natalia Bobkova, Russian Academy of Science, Russia

12h00   **Discussions & Poster Presentations**

12h30 Lunch Break & Network Session

Session 2: Olfaction 2018: Towards a Personalized Emotional Perspective

Chairpersons: Djamchid Assadi, Tristram Wyatt

14h00   **Exploration into olfaction and experiential strategy: State of Art**
Djamchid Assadi, Groupe ESC Dijon-Bourgogne, France

14h30   **Sexing up human pheromones: How a corporation created a "scientific" myth**
Tristram Wyatt, University of Oxford, United Kingdom

15h00   **Enhancing user interaction with olfactory experiences**
Marina Carulli, Politecnico di Milano, Italy

16h00   **The Language of Smell: Connecting linguistic and psychophysical properties of odors**
Jonas Olofsson, Stockholm University, Sweden 16h00

16h30   **Personal scent for a health and productivity management**
Shuji Fujita, Sony corp, Japan

16h45   **Smells of a modern world: How to identify and characterize odorants in contemporary materials**
Christoph Wiedmer, Fraunhofer-Institute for Process Engineering and Packaging IVV, Germany

17h00   **Scents and memory in virtual reality**
Veikko Surakka, University of Tampere, Finland

17h15   **Human response to sensory effects on 360° VR content**
Sang-Kyun Kim, Myongji University, Republic of Korea

17h30   **Posters Presentation – Speed presentation 5 minutes - day 1**

World's first olfactive fragrance to modulate skin microbiota
Céline Klotz, Innovation Labo, France

Overexpression human dopamine receptor using bacterial expression system for construction dopamine detection sensor
Dahye Kim, Korea Research Institute of Bioscience and Biotechnology, Korea

Colorimetric sensing of volatile acids from the body
Jessica Gunnoo, School of Chemical Sciences, Ireland

Towards visualising household air pollution: Chemo-responsive sensors for volatile organic compounds
Emer Duffy, School of Chemical Sciences, Ireland

Microbioal VOC fingerprints: Rapid detection of antimicrobial resistance in pathogenic bacteria
Allyson Dailey, George Mason University, USA

Specific intranasal and central trigeminal electrophysiological responses in Parkinson's disease
Johannes Frasnelli, Université du Québec in Trois-Rivières, Canada

Essential olfactory receptors in stylet of the major disease vector, Aedes aegypti
Hyung Wook Kwon, Incheon National University, Republic of Korea

18h00   **Discussion & End of the first day**

19h30   **DOS Dinner 2018**

The dinner will be at the Hyoki restaurant
103-0027 Tokyo, chuo-ku, nihombashi 3-13-11 Yushikyogyou kaikan 1F
〒103-0027, 東京都中央区日本橋3-13-11, 油脂工業会館1F
www.hyoki.jp/shop/yaesu/

If you have not yet registered and wish to participate, you can register on the site or online.

Digital Olfaction Society

6th DOS Annual Meeting

Day 2 – December 4, 2018

8h25   **Opening of the second day**

Session 3: Digital Olfaction: Recent Advances, Research & Development and Perspectives

Chairpersons: Jesús Lozano Rogado, Kohji Mitsubayashi, Simon Niedenthal, Yasuyuki Yanagida

9h00   **Miniaturized electronic nose systems for digital olfaction: Present and future applications**
Jesús Lozano Rogado, University of Extremadura, Spain

9h25   **Bio-electronic nose: A mouse nose as an ultra sensitive and versatile chemical detector**
Dmitry Rinberg, NYU Neuroscience Institute, USA

9h50   **Sniff-cam for real-time imaging of volatile chemicals**
Kohji Mitsubayashi, Tokyo Medical and Dental University, Japan

10h15   **OWIDGETS: A device-independent toolkit for olfactory experience design**
Emanuela Maggioni, University of Sussex, United Kingdom

10h25 Coffee Break & Network Session

11h00   **Digital olfaction: Imaging an odor**
Thierry Livache, CSO of Aryballe Technologies, France

11h25   **Smell-enabled VR games for olfactory training**
Simon Niedenthal, Malmö University, Sweden

11h50   **Exploration of biological olfactory mechanism using randomly mixed receptor signals decoded by reservoir computing**
Sanato Nagata, Hitachi, Ltd., Japan

12h00   **Neural network within an olfactory sensory unit for nestmate and non-nestmate discrimination of ant**
The Ultrastructures and Mathematical Simulation for olfactory information modification
Mamiko Ozaki, Kobe University, Japan

12h10   **Challenges in the application of machine learning methods to the prediction of odor and how to address them**
Sebastian Hettenkofer, Fraunhofer Institute for Integrated Circuits IIS, Germany

12h20   **Odor sensing and classification by using machine learning**
Sigeru Omatu, Osaka Institute of Technology, Japan

12h30   **Stability of the vortex ring trajectory by the shape of the APERTURE for generating scent fields**
Kyuma Watanabe, Meijo University, Japan

12h40   **Online scent classification using measurements from an ion-mobility spectrometry-based electronic nose**
Philipp Müller, Tampere University of Technology, Finland

12h50   **Digital olfaction with graphene**
Gregory F. Schneider, Leiden University, NL

14h00 – 16h00: DOS Displaying & Demonstrations

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 his project.

Planning of the Demonstrations
Technology for scent classification and production
Jussi Rantala, University of Tampere, Finland

Transmitting aromas by using a miniaturized electronic-nose and an olfactory display
Jesús Lozano Rogado, University of Extremadura, Spain

Presentation of Sony new product "AROMASTIC"
Cedric Duvert, Sony corp, Japan

Digital olfaction: Imaging an odor
Thierry Livache, CSO of Aryballe Technologies, France

16h00 Coffee Break & Network Session

16h15   Posters Presentations – Speed presentation 5 minutes – day 2

Scent transfer over a communication network
Katri Salminen, University of Tempere, Finland

Online scent classification using measurements from an ion-mobility spectrometry-based electronic nose
Philipp Müller, Tampere University of technology, Finland

FET Biosensor for detection of Toluene gas
Moonil Kim, Korea Research Institute of Bioscience and Biotechnology, Korea

Bioelectronic nose for mimicking the human sense of smell using grapheme micropattern (GM) geometries
Seon Joo Park, Korea Research Institute of Bioscience and Biotechnology, Korea

Personal electronic nose for beer aroma detection
Jesús Lozano Rogado, University of Extremadura, Spain

Sniff olfactometery: elemental and configural perceptions
Terry Acree, Cornell University, USA

Two approaches to bioelectronics sensor mimicking insect chemosensory system
Soo Ho Lim, Incheon National University, Republic of Korea

Comparision of exhaled breath using E-nose and blood test for diabetes
Joon-boo Yu, Kangwon National University, Republic of Korea

16h30   Discussion and Concluding Remarks

       Digital Olfaction Awards

17h00   End of the 6th DOS Annual Meeting 2018