

OS8: Advanced Physical Stimuli and Biological Responses

October 30, 2020
ROOM1 (Webex)

- 9:45-9:50 **Opening**
Takehiko Sato, Toshiro Ohashi
- OS8-1 **Applications of Apatites Containing Electrospun Nanofibers for the Repair of Nerve Tissue** (*Invited*)
9:50-10:20 Hsueh-Fang Huang (National Taiwan University of Science and Technology, Taiwan), Yuki Shirosaki (Kyushu Institute of Technology, Japan), Meng-Jiy Wang (National Taiwan University of Science and Technology, Taiwan)
- OS8-2 **Identification of Leader Cell in Migration Using Deep Learning**
10:20-10:35 Baasansuren Otgon, Mun Kit Lai (Hokkaido University, Japan), Danaa Ganbat (Mongolian University of Science and Technology, Mongolia), Toshiro Ohashi (Hokkaido University, Japan)
- OS8-3 **Droplet Manipulation using Plasma Treatment and Airflow**
10:35-10:50 Cheng-Yun Peng, Chia-Hung Dylan Tsai (National Chiao Tung University, Taiwan)
- OS8-4 **Mechanical Characterization of Collective Cell Migration in Microchannels** (*Invited*)
11:10-11:40 Toshiro Ohashi (Hokkaido University, Japan)
- OS8-5 **Investigation of Cell Behavior on Plasma Polymerized Polypyrrole with Micro-pattern**
11:40-11:55 Jui-Yu Tung, Chien-Hung Kuo, Meng-Jiy Wang (National Taiwan University of Science and Technology, Taiwan)
- OS8-6 **Development of Analyzing Method for Cancer Cell Migration Using Long-term Time-lapse**
11:55-12:10 Hayato Tada, Satoshi Uehara, Chia-Hsing Chang, Takehiko Sato (Tohoku University, Japan)
- OS8-7 **Comparison of the Concentration of Reactive Chemical Species in Water by Plasma Jet and Plasma-activated Microbubbles Jet**
12:10-12:25 Mu-Chien Wu (National Chiao Tung University, Taiwan / Tohoku University, Japan), Satoshi Uehara, Tomoki Nakajima, Takehiko Sato (Tohoku University, Japan), Jong-Shinn Wu (National Chiao Tung University, Taiwan)
- OS8-8 **Experimental Observations of Traveling Wave Propagation on Artificial Basilar Membranes**
12:25-12:40 Hiroki Yamazaki, Kouhei Noda, Satoyuki Kawano (Osaka University, Japan)

- OS8-9 **Atmospheric-Pressure Plasma Jet Applied to Draw Versatile Microfluidic Channels for Biomedical Applications** (*Invited*)
 13:30-14:00 Chia-Hung Dylan Tsai, Cheng-Yung Peng (National Chiao Tung University, Taiwan)
- OS8-10 **Selective Destruction toward A375 Human Melanoma Cells by Atmospheric Pressure Plasma Jet Treatments**
 14:00-14:15 Saitong Muneekaew, Meng-Jiy Wang (National Taiwan University of Science and Technology, Taiwan)
- OS8-11 **Numerical Simulation of Water Distributions in Bio-protective Solution During Drying Process**
 14:15-14:30 Lin Wei, Ryo Shirakashi (The University of Tokyo, Japan)
- OS8-12 **Enhancing the •OH Generation by Mixing Water Aerosol with Plasma at Downstream Region for Biological Applications**
 14:30-14:45 Tsung-Rong Lin, Rui-Zhe Zhang, Yun-Chien Cheng (National Chiao Tung University, Taiwan)
- OS8-13 **Liquid Discharge Characteristics Under Exposure to Ultraviolet-rays for Observation of Hydrated Electron**
 14:45-15:00 Siwei Liu, Yunchen Xiao, Satoshi Uehara, Tomoki Nakajima, Takehiko Sato (Tohoku University, Japan)
- OS8-14 **Atmospheric-pressure Plasma Effects on Cancer Cells and Impedance Matching Circuit to Improve Plasma Power Conversion Efficiency** (*Invited*)
 15:20-15:50 Po Han Niu, Yi-Jing Cheng, Yun-Chien Cheng (National Chiao Tung University, Taiwan)
- OS8-15 **Nanosecond Pulsed Current Under Plasma-producing Conditions Induces Morphological Alterations in Human Fibrosarcoma Cells** (*Invited*)
 15:50-16:20 Chia-Hsing Chang (Tohoku University, Japan), Kenichi Yano (Kumamoto University, Japan), Takehiko Sato (Tohoku University, Japan)
- 16:20-16:25 **Award Ceremony**
- 16:25-16:30 **Closing**
Satoyuki Kawano, Ryo Shirakashi