## 2019 **9.30**

@ Osaka City Univ.
Tanaka Memorial Hall

# International Workshop on Quantum Sensing & Biophotonics 2019

9:20 - 9:30	Opening Remarks
9:30 - 10:20	Brian Patton, Univer

9:30 - 10:20 Brian Patton, University of Strathclyde, UK "Nanodiamond as a robust probe for biological systems"

10:20 - 10:30 Break

10:30 - 11:20 Kangwei Xia, Chinese Univ. of Sci. & Tech., Hong Kong "Nanometer-precision non-local deformation sensing using NV centers in diamond"

11:20 - 11:45 Masazumi Fujiwara, OCU, Japan
"Nanodiamond quantum thermometry for biological applications"

11:45 - 13:00 Lunch

13:00 - 13:25 Eriko Kage-Nakadai, OCU, Japan
"In vivo imaging of the nervous system of the nematode C. elegans"

13:25 - 13:50 Hideyuki Matsumoto, OCU, Japan
"High resolution Opto-Electrophysiology: a new tool for analyzing brain functions"

13:50 - 14:40 Kazuhide Sato, Nagoya University, Japan "Near infrared Photoimmunotherapy: mechanism and applications"

14:40 - 15:10 Coffee Break

15:10 - 16:00 Ikuko Fujiwara, OCU, Japan "Cell motility based on the polymerization dynamics"

16:00 - 16:50 Jia Su, Southern University of Sci. & Tech., China "Photoswitchable fluorescent molecular nanoparticles with giant amplification effect"

16:50-17:00 Concluding Remarks

17:00 - 19:00 Poster

### Important dates

Registration: Sept. 26

Poster submission: Sept. 12

#### Website





#### **Purpose**

This workshop aims to find technical challenges when implementing quantum sensing technology to real analyzing tools of chemistry and biology. Quantum sensing is an emergent technology which may bring its unprecedented high sensitivity into biochemical analysis. However its potential needs to be properly developed in the context of standard analytical methods of the target areas. By having invited speakers working in *quantum sensing*, *photochemistry*, *biophotonics*, these points will be discussed. The poster session covers broad related fields, such as *material science*, *electronics*, *informatics*, *and biomedical science*.

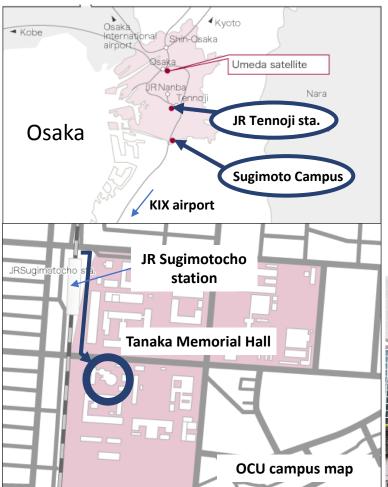
https://www.osaka-cu.ac.jp/ja/event/2019/190930-2

#### Venue

#### Osaka City Univresity

Sugimoto Campus, Tanaka Memorial Hall Access:

https://www.osaka-cu.ac.jp/en/about/access



#### Registration

Please complete registration and poster submission (if you wish to present) in the following link or QR-code. On-site registration may be possible if seats are still available.

https://forms.gle/kzBfqYQSkS5X9o8h8

Due dates:

Poster: Sept. 12

Registration: Sept. 26



Registration



#### **Contact information**

Email: iwqsb2019@gmail.com

Organizing committee:

OCU: Masazumi Fujiwara, Eriko Nakadai, Hideyuki Matsumoto, Eiji Shikoh, Tsutomu Matsubara, Kai Cai

Keio U: Yutaka Shikano,