

## UK-Japan Workshop on Biosensing Technologies for Innovative Healthcare

# Sponsored by British Embassy, Tokyo with support from Tokyo university of agriculture and technology

Workshop programme

Monday 1 December

09:30-10:00 **Registration** + **Coffee** 

(Chair: Dr Bachmann)

10:00-10:05 Opening remarks by Ms Beth Hogben, the British Embassy Tokyo & Prof Tadashi Matsunaga, President, Tokyo University of Agriculture and Technology

10:05-10:35 "Biomolecular engineering as the biosensing technology"

Prof Koji Sode, Tokyo University of Agriculture and Technology

10:35-11:05 "Sensor technologies for mobile healthcare"

Prof Christopher Lowe, University of Cambridge

11:05-11:35 "Bioimaging with integrated electrochemical devices"

Prof Tomokazu Matsue, Tohoku University

11:35-12:05 "Size matters: Engineering biosensors at the micro-, nano- and molecular scales"

Prof Anthony Cass, Imperial College London

12:05-13:00 Lunch

(Chair: Prof Sode)

13:00-13:30 "Insulin pump therapy and continuous glucose monitoring for the





#### improved management of diabetes"

Prof John Pickup, King's College London

13:30-14:00 "Nanostructures and photonics based biosensors for medical diagnosis and cellular analyses"

Prof Eiichi Tamiya, Osaka University

14:00-14:30 "The development and commercialization of magnetic detection technology for biosensor applications"

Prof Richard Luxton, University of the West of England

14:30-15:00 "Molecularly imprinted polymers as biomimetic sensing materials" Prof Toshifumi Takeuchi, Kobe University

15:00-15:20 Coffee break

(Chair: Prof Tamiya)

15:20-15:50 "Nanomaterials and microdevices for electrochemical and optical biosensors"

Prof Osamu Niwa, National Institute of Advanced Industrial Science and Technology

15:50-16:20 "Biosensors for point of care testing and precision medicine in infectious diseases"

Dr Till Bachmann, University of Edinburgh

16:20-16:50 "Cavitas sensors and smell camera for human biosensing" Prof Kohji Mitsubayashi, Tokyo Medical and Dental University\_

16:50-17:30 Wrap up discussion

17:40- Networking reception at **Embassy** 

18:30 - **Banquet at Hotel Monterey** 





Tuesday 2 December

(Chair: Prof Sode)

10:00-10:20 "Biosensing of glycated proteins for healthcare"

Dr Akane Sakaguchi-Mikami, Tokyo University of Technology

10:20-10:40 "Non-invasive biosensors for stress monitoring"

Prof Masaki Yamaguchi, Iwate University

10:40-11:00 "Nanoneedle technology for biosensing"

Dr Chikashi Nakamura

11:00-11:20 "In silico maturation: improvement of aptamer functions for biosensing"

Prof Kazunori Ikebukuro, Tokyo University of Agriculture and Technology

11:20-11:50 "Unlocking biosensing knowledge for business innovation"

Dr. Liqun Yang, The Knowledge Transfer Network

12:00-13:00 Lunch

(Chair: Dr Bachmann)

13:00-13:20 "Inkjet printed microfluidic paper-based analytical devices (µPADs)"

Prof Daniel Citterio, Keio University

13:20-13:40 "Electrochemical detection techniques to provide a portable and highly sensitive endotoxin sensor"

Dr Kumi Y-Inoue, Tohoku University

13:40-14:00 "Paper based biosensing technology"

Dr Isao Shitanda, Tokyo University of Science

14:00-14:20 "Single cell biosensing technology for circulating tumour cell analysis"

Dr Tomoko Yoshino, Tokyo University of Agriculture and Technology

14:20-14:40 "Magnetic biosensing based on superparamagnetic nanoparticles"





Prof Yoshitaka Kitamoto, Tokyo Institute of Technology

## 14:40-15:10 Round Table discussion: Summary of finding and way forward

#### 15:10-15:15 **Closing remark**

Prof Tadashi Matsunaga, President, Tokyo University of Agriculture and Technology

#### 15:15- Group photo

Venue; British Embassy Tokyo

〒102-8381

1- Ichiban-cho, Chiyoda-ku, Tokyo, Japan





## Workshop programme

## Wednesday 3 December

Open seminar

15:30 door open

| Opening remarks by British Consulate – General Oosaka          |
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|  |
| Dr. Liqun Yang, The Knowledge Transfer Network                 |
| Emeritus Prof Christopher Lowe, University of Cambridge        |
| Prof Anthony Cass, Imperial College London                     |
| Coffee break   |
| Prof Richard Luxton, University of the West of England         |
| Dr Till Bachmann, University of Edinburgh                      |
| Prof Koji Sode, Tokyo University of Agriculture and Technology |
| Discussion   |
| Networking Café  |
|  |

## Venue; ARKRAY, Inc. Kyoto Laboratory

〒602-0008

Yousuien-nai, 59 Gansuin-cho, Kamigyo-ku, Kyoto, Japan

