





# 2018 UK-JSPS Symposium

# SHITSUKAN approach to digital colour sensing: human colour vision for material quality

Date: 8 August 2018

Venue: University of Manchester, School of Electrical and Electronic Engineering

Room D45 (D floor) at Sackville Street Building

## Research symposium

SHITSUKAN is a Japanese word for human sensing of material quality, for example, gloss or wetness of surfaces, translucence of skin. Recognition of SHITSUKAN is an ability of the human brain to estimate the nature of objects and plays essential rules in value-based behaviour selection and body motor control in our everyday life. Sensing of SHITSUKAN is obtained through multiple modalities such as vision and touch. Thus, SHITSUKAN is based on a complex high-dimensional neural representation formed by an integration of sensory signals. Understanding SHITSUKAN will unmask critical scientific questions about human sensory mechanisms, and its computational modelling will contribute to the development of the future information-processing technologies.

Japan's MEXT (Ministry of Education, Culture, Sports, Science and Technology) SHITSUKAN project, led by Dr Shin'ya Nishida (NTT Communication Science Laboratories), is an ambitious and innovative multidisciplinary research consortium. We are delighted to invite leading SHITSUKAN scientists from Japan, who will present insights into their individual research.

You will have a chance to learn the JSPS activities and their funding opportunities (inc. joint schemes with the UKRI and the Royal Society) for your research.

#### **Presenters**

- Shin'ya Nishida: NTT Communication Science Laboratories

- Yoko Mizokami: Chiba University

- Yu Fang: Honda Research Institute Japan

- Hideki Tamura: Toyohashi University of Technology

- David Foster: University of Manchester

- Ryo Satomura: JSPS

## **Provisional programme**

9:30 Registration

10:00 Prof Nobuo Ueno (JSPS Director): Opening of the JSPS symposium

10:10 Kinjiro Amano: Introduction

10:30 Yoko Mizokami: Is perception of skin color and its shitsukan special?

11:10 Yu Fang: Influence of facial color distribution on perception of pigment spot

- 11:40 **Hideki Tamura** (co. Eugen Prokott and Roland Fleming: Justus-Liebig-University Giessen): Distinguishing mirror from glass
- 12:10 Short discussion
- 12:20 Lunch
- 13:30 **Shin'ya Nishida** : Understanding human recognition of material properties for innovation in SHITSUKAN science and technology
- 14:10 **Prof David Foster**: Human colour vision and hyperspectral imaging
- 14:45 Panel discussion
- 15:00 **Ryo Satomura (JSPS)**: JSPS activities and funding opportunities (inc. joint schemes with the UKRI and the Royal Society)
- 15:30 General Discussion with refreshments
- 17:00 End

# Registration

All welcome (free).

To reserve your place and further details, please contact

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