



The University of
Nottingham

UNITED KINGDOM • CHINA • MALAYSIA

Optics Within Life Sciences 2014 (OWLS 2014)

10th -12th June

University of Nottingham Ningbo China

www.owls2014.org



Programme of Events

Tuesday 10th June 2014

Registration and Coffee from 8:00am

09.00 Opening Ceremony of the OWLS 2014 International Conference

Gert Von Bally - International Society of Optics Within Life Sciences
Steve Morgan - Conference Chair
Shen Weiqi - University of Nottingham Ningbo, China
Ningbo Science and Technology Association

09.30 Tony Wilson - University of Oxford, UK
"Optical sectioning, focusing & trapping in optical microscopy"

10.15 Group Photograph

Coffee and Refreshments

11.40 Sai Chu - City University of Hong Kong, Hong Kong
"Generation of mode locked laser pulses with a high order micro-ring resonator"

11.55 Melissa Mather - University of Nottingham, UK
"Label free characterisation of live cells in monolayer culture using high resolution, multi modal light microscopy"

12.10 Michelle Peckham - University of Leeds, UK
"Imaging cardiomyocytes in health and disease"

Lunch

13.40 Seung-Woo Lee, University of Kitakyushu, Japan
"Fibre-optic chemical sensors functionalized with nanoassembled thin films: A challenge for small molecule detection"

14.10 Lawrence Wu, Hong Kong City University, Hong Kong
"Evanescantly Excited Localized Surface Plasmon Resonance Biosensor Based on Self-assembly Gold Nanoislands"

14.25 Liang Song - Shenzhen Institutes of Advanced Technology, CAS, China
"Multi-scale functional and molecular photoacoustic imaging"

14.40 Aaron Ho - Chinese University of Hong Kong, Hong Kong
"Centrifugal Force Actuated Microfluidics - A possible choice for health diagnostics device platforms"

Coffee and Refreshments

15.40 Sergiy Korposh - University of Nottingham, UK
"Ammonia breath detection using optical sensors based on self assembled nano-thin films"

16.10 Ma Hui - Tsinghua University, Shenzhen, China
"Label free imaging of cells and tissues using polarised light"

16.25 Arthur E.T Chiou— National Yang-Ming University, Taiwan
"Optical Bio-microrheology"

17.00 *Poster Session and Drinks Reception*

Programme of Events

Wednesday 11th June 2014

- 09.00 Xu Liu - Zhejiang University, China
"The development of optical nanoscopy"
- 09.40 Suejit Pechprasarn - University of Nottingham, UK
"Confocal surface plasmon interferometry: An approach for ultrastable biological measurement"
- 09.55 Peng Xiu - Zhejiang University, Hangzhou, China
"Light field reconstruction refractive index microscopy"
- 10.10 Amanda Wright - University of Nottingham, UK
"Investigating interactions at the single cell/vesicle level using optical tweezers"

Coffee and Refreshments

- 11.10 David Sampson - University of Western Australia, Australia
"Structural and functional imaging with a microscope-in-a-needle for medicine and biology"
- 11.40 Yilei Zhang - Nanyang Technological University, Singapore
"Hydrogel based optical fiber for neural engineering"
- 11.55 Yaping Zhang - University of Nottingham Ningbo, China
"Sensitivity investigation on silicon on silica waveguide biosensors"
- 12.10 Nanguang Chen - National University of Singapore, Singapore
"Advanced microscopy platform for high-resolution in-vivo imaging of zebrafish"

Lunch

- 13.40 Mike Somekh - Hong Kong Polytechnic University, Hong Kong (delivered on behalf of Richard Smith, University of Nottingham)
"Kinetic detection of Alzheimer's Disease biomarkers with wide field surface plasmon instrument with custom CMOS cameras"
- 13.55 Yong-Ping Zheng - Hong Kong Polytechnic University, Hong Kong
"An OCT-based endoscopic suction probe for tissue elasticity measurement"
- 14.10 Steve Matcher - University of Sheffield, UK
"The application of volumetric, label-free microscopies in tissue engineering"
- 14.40 **OWLS Members Assembly - all delegates**

Coffee and Refreshments

- 16.00 Coach will depart for the Ningbo Sofitel Wanda Hotel
- 18.00 Coach will depart the Ningbo Sofitel Wanda Hotel for the Conference Dinner
- 19.00 Drinks reception and Conference Dinner - Nanyuan Xinzhi Hotel

Programme of Events

Thursday 12th June 2014

- 09.00 Min Gu - Swinburne University of Technology, Australia
"Two photon fluorescence endoscopy: toward in vivo biomagnetic imaging"
- 09.40 Patrick Kramer - National University of Singapore, Singapore
"In vitro study of dengue virus membrane dynamics using fluorescence lifetime-FRET and fluorescence correlation microscopy"
- 09.55 Kevin Webb - University of Nottingham, UK
"Condenser-free contrast methods in transmitted-light microscopy"
- 10.10 Zhang Zhihong - Huazong University of Science and Technology, China
"Intravital imaging of anti-tumor immunotherapy in tumor microenvironment"

Coffee and Refreshments

- 11.10 Ling Fu - Huazhong University of Science and Technology, China
"Phase shaping fiber continuum in multicolor , two-photon microscopy for immunophotonics"
- 11.40 Renxian Li - Xidian University, China
"Optical torque exerted on a single cell induced by a Bessel beam"
- 11.55 Xuxan Yang - Peking University, China
"Resolving NV centers in diamond with nanoscale resolution"
- 12.10 Valery Tuchin - Saratov State University, Russia
"Tissue optics and in vivo optical clearing technologies"

Lunch

- 13.40 Lihong Wang - Washington University in St Louis, USA.
"Photoacoustic Tomography: Ultrasonically beat optical diffusion and diffraction"
- 14.20 Changjun Min - Nankai University, China
"Dynamic plasmonic trapping and manipulation of metallic particles for SERS application"
- 14.50 Dan Zhu - Nanjing University of Science and Technology, China
"The retinal coherence tomography based on polarization phase-shifting technology"
- 15.05 Zicheng Huang - Nanjing University of Science and Technology, China
"Imaging skin structures and compositions using indirect optical vector parameter super resolution microscopy"
- 15.20 Gert Von Bally - University of Muenster, Germany
"Living cell analysis by digital holographic microscopy"
- 15.50 Closing address and departure