Nano and Bio-Imaging - latest developments in biophotonics

Date: Wednesday 15th October 2014
Venue: Jaguar Suite, Ricoh Arena, Coventry

THE CONFERENCE & EXHIBITION ARE FREE TO ATTEND

PROGRAMME

10.00  - registration and exhibition opens -
10.30  Introduction and welcome

Session 1 | Chair: Hamid Dehghani
10.35  Imaging cells using surface-enhanced Raman spectroscopy for biomedical insight
Dr Sumeet Mahajan, Chemistry and Institute of Life Sciences, University of Southampton, UK

10.55  Dynamic multi-scale imaging: single-molecules to single-cells
Dr Alan Lowe, Department of Biological Sciences, UCL, UK

11.15  KEYNOTE
STED imaging of neuronal synapses
Prof Valentin Nagerl, Interdisciplinary Institute for Neuroscience of the CNRS, University of Bordeaux, France

11.45  Poster Session In the exhibition hall

1. Study of toxoplasmosis Using Raman Micro-spectroscopy
Abida Naemat, School of Physics and Astronomy, University of Nottingham, UK

2. Characterising collagen photo-degradation mechanism using multimodal optical imaging approach
Arunthathi Manickavasagem, Biomaterial, Biomimetics & Biophotonics Research Group, King's College London, Dental Institute, London

3. Fluorescence amplified detection of residual bacteria in the root canal space
Dylan Herzog, Biomaterials, Biomimetics and Biophotonics Research Group, King's College London Dental Institute at Guy's Hospital, London, UK

4. Voltage Sensitive Surface Plasmon Resonance
Sidahmed Abayzeed, Kevin Webb, Richard Smith, Mike Somek and Chung See, Electrical Systems and Optics, University of Nottingham

5. Use of plasmonic and photonic structures to enhance optical trapping
Mina Mossayebi, Applied Optics Group, Electrical Systems and Optics Division, University of Nottingham

12.15  - break - Lunch can be purchased from the Townes Cafeteria in the exhibition hall.

Session 2 | Chair: Fred Festy
13.45  KEYNOTE
Accelerating Progress in Light Sheet Microscopy
Prof Kishan Dholakia, School of Physics and Astronomy, University of St Andrews, UK

14.05  Development of the zebrafish eye lens tracked using SPIM
Dr Laura Young, Department of Physics, Centre for Advanced Engineering, University of Durham, UK

14.25  Imaging the mechanisms and functions of leukocytes
Dr Leo Carlin, Faculty of Medicine, National Heart & Lung Institute, Imperial College London, UK

14.45  Adaptive optics correction for STORM microscopy
Dr Dan Burke, Centre for Neural Circuits and Behaviour, University of Oxford, UK.

15.05  - comfort break-

Session 3 | Chair Hamid Dehghani
15.20  Imaging immune cell interactions at super-resolution
Dr Dylan Owen, Experimental Biophysics and Nanotechnology, Kings College London, UK

15.40  Optical nanoscopy of Herpes Simplex Virus-1 assembly: a study of the virus structure at the nanometre scale
Dr Romain Laine, Laser Analytics Group, University of Cambridge, UK

16.00  Real time, label-free, characterisation of live cells using high resolution, multi-modal light microscopy
Dr Melissa Mather, Institute for Biophysics, Imaging & Optical Science, Faculty of Engineering, University of Nottingham, UK

CONFEREE ADMINISTRATION
Brenda Hargreaves, Enlighten Meetings
T: +44 (0) 1372 750555 Email: brenda@xmarkmedia.com

Please register to attend at www.photonex.org
Nano and Bio-Imaging - latest developments in biophotonics

Date: Wednesday 15th October 2014
Venue: Jaguar Suite, Ricoh Arena, Coventry

16.20 Micro-endoscopic imaging reveals insights into signal transduction inside living blood vessels
Dr Chris Saunter, Department of Physics, Centre for Advanced Engineering, University of Durham, UK

16.40 Concluding comments
16.45 - end of meeting -
Please join the exhibitors for drinks in the exhibition hall at 5.05pm

WHAT’S IT ALL ABOUT

Significant advances in the development of optical techniques have led to an ever increasing role of photonics in the study of various problems in the life sciences, in biological and chemical sciences, in medicine, clinical sciences, neurophysiology etc. Researchers are continually looking for better ways to analyse complex processes and photonics underpins many of the most promising approaches for medical diagnosis, drug development & other clinical and life science applications.

This conference focuses on imaging on the nano-scale as widely used in chemical and biological sciences. It is expected that attendees will be attracted from far and wide to listen, connect and network with leaders in photonics from the UK’s vibrant academic community.

Join us for the free meeting to explore advances in key methods and techniques used in life sciences.

The meeting comprises a programme of invited speakers and a poster session of contributed papers.

CALL FOR POSTERS

We invite contributions for poster presentation.

CONTRIBUTORS

Prospective additional speakers should advise us of their wish to be involved as soon as possible, providing a title of their presentation.

To respond to this Call please send an email to brenda@xmarkmedia.com.

PROGRAMME COMMITTEE

Dr Frederic Festy
Senior Lecturer,
Dental Institute, King’s College London.
Email: frederic.festy@kcl.ac.uk

Dr Brian Patton
Royal Society University Research Fellow,
University of Oxford.
Email: brian.patton@cncb@ox.ac.uk

Dr Hamid Dehghani
Senior Lecturer in Medical Imaging,
School of Computer Science,
University of Birmingham.
Email: h.dehghani@cs.bham.ac.uk

MEETING ATTENDEES

To register as an attendee for this meeting please go to WWW.PHOTONEX.ORG and register as a visitor to the exhibition. On the same registration form please tick the box for this meeting.

Once registered you will be sent regular updates.

CALL FOR POSTERS

We invite contributions for poster presentation.

CONTRIBUTORS

Prospective additional speakers should advise us of their wish to be involved as soon as possible, providing a title of their presentation.

To respond to this Call please send an email to brenda@xmarkmedia.com.

SUPPORTED BY