

# **2014 International Conference on Optical MEMS and Nanophotonics**

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# 2014 International Conference on Optical MEMS and Nanophotonics Program

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## MONDAY, 18 AUGUST 2014

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08:45 Welcome

### **MOp1: Sensing and Metrology**

**Session Chair:** Andreas Seifert, IMTEK, University of Freiburg, Germany

- 09:00 **MOp1.1:** PLENARY: ENLIGHTENING THE WORLD **1**  
Professor Sir David Payne CBE FRS FREng  
University of Southampton, UK
- 09:45 **MOp1.2:** MINIATURE FIBER FACET ATOMIC FORCE MICROSCOPE USING PHOTONIC CRYSTAL SENSORS **3**  
Antonio Gellineau, Yu-Po Wong, Andrew Wang, Manish J. Butte, Olav Solgaard  
Stanford University, USA
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Kazuhiro Takahashi, Ryo Ozawa, Makoto Ishida, Kazuaki Sawada  
Toyohashi University of Technology, Japan
- 10:15 **MOp1.4:** REDUCED BLACKBODY MICROHEATERS FOR MEASURING HIGH TEMPERATURE THERMOLUMINESCENT GLOW CURVE PEAKS **7**  
Philip R. Armstrong, Merlin L. Mah, Lucas Taylor, Joseph J. Talghader  
University of Minnesota, Minneapolis, USA
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Institute of Photonics Technologies, National Tsing Hua University, Taiwan
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University of York, UK

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12:15	<b>MOp2.5:</b> SURFACE-PLASMON-BASED FLEXIBLE COLOR FILTER USING AL NANOSTRUCTURE ARRAY ON PARYLENE-N THIN FILM Hayato Kumagai <sup>1</sup> , Hiroaki Honma <sup>1</sup> , Kazuhiro Takahashi <sup>1</sup> , Makoto Ishida <sup>1,2</sup> , Kazuaki Sawada <sup>1,2</sup> <sup>1</sup> Toyohashi University of Technology, Japan <sup>2</sup> Electronics-Inspired Interdisciplinary Research Institute (EIIRIS), Japan	<b>17</b>
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<sup>1</sup>Toyohashi University of Technology, Japan  
<sup>2</sup>JSPS Research Fellow, Japan
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Benfeng Bai<sup>3</sup>, Qiaofeng Tan<sup>3</sup>, Guofan Jin<sup>3</sup>, Kok-Wai Cheah<sup>5</sup>, Cheng-Wei Qiu<sup>6</sup>, Jensen  
Li<sup>1</sup>,  
Thomas Zentgraf<sup>4</sup>, Shuang Zhang<sup>1</sup>  
<sup>1</sup>University of Birmingham, UK  
<sup>2</sup>Heriot-Watt University, Scotland  
<sup>3</sup>Tsinghua University, China  
<sup>4</sup>University of Paderborn, Germany  
<sup>5</sup>Hong Kong Baptist University, Hong Kong  
<sup>6</sup>National University of Singapore, Singapore
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**Session Chair:** Aaron Danner, National University of Singapore, Singapore

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Akihiro Murayama<sup>2,5</sup>, Seiji Samukawa<sup>1,3,5</sup>  
<sup>1</sup>WPI-Advanced Institute for Materials Research, Tohoku University, Japan  
<sup>2</sup>Graduate School of Information Science and Technology, Hokkaido University, Japan  
<sup>3</sup>IFS, Tohoku University, Japan  
<sup>4</sup>NAIST, Japan  
<sup>5</sup>JST-CREST, Japan

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<sup>1</sup>University of Maryland, USA  
<sup>2</sup>Center for Nanoscale Science and Technology, NIST, USA

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National Chiao Tung University, Taiwan

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Hong Kong Polytechnic University, China

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Graduate Institute of Photonics and Optoelectronics & Department of Electrical  
Engineering, National Taiwan University, Taiwan

15:00 Excursion – Riverside Museum

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**WEDNESDAY, 20 AUGUST 2014**

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University of Glasgow, Scotland, UK
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Bachelier<sup>1</sup>, P. Vincent<sup>2</sup>, O. Arcizet<sup>1</sup>  
<sup>1</sup>Institut Néel, Université Grenoble Alpes - CNRS:UPR2940, France  
<sup>2</sup>Institut Lumière Matière, UMR5306, CNRS - Université Claude Bernard Lyon 1,  
France
- 09:45 **WNa3.3:** TRAPPING NANO-SIZED PARTICLE BY WAVEGUIDE-COUPLED GOLD BOWTIE **75**  
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<sup>1</sup>School of Integrated Design Engineering Keio University, Japan  
<sup>2</sup>Department of System Design Engineering Keio University, Japan  
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<sup>2</sup>ISAS/JAXA, Japan  
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<sup>2</sup>Si-Ware Systems, Egypt

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<sup>1</sup>Mentor Graphics Corp  
<sup>2</sup>IMEC, Belgium  
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<sup>2</sup>Mechanical Engineering Department, Massachusetts Institute of Technology, USA  
<sup>3</sup>Singapore-MIT Alliance for Research and Technology (SMART) Centre, Singapore  
<sup>4</sup>Shanghai Jiao Tong University – University of Michigan Joint Institute, China

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18:30 **GALA DINNER**



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**THURSDAY, 21 AUGUST 2014**

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**ThNa4: Nanofabrication****Session Chair:** Wibool Piyawattanametha, KMITL, Thailand

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<sup>1</sup>Institute of Nanostructure Technologies and Analytics  
<sup>2</sup>Institute of Physics and <sup>1,2</sup>CINsaT, University of Kassel, Germany
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<sup>1</sup>Massachusetts Institute of Technology, Cambridge, MA, United States  
<sup>2</sup>CEMITEC, Noain, Spain  
<sup>3</sup>Singapore-MIT Alliance for Research and Technology (SMART) Centre, Singapore  
<sup>4</sup>Shanghai Jiao Tong University – University of Michigan Joint Institute, China
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Eiji Higurashi<sup>4</sup>, Renshi Sawada<sup>1</sup>  
<sup>1</sup>Graduate School of Systems Life Sciences, Kyushu University, Fukuoka-City,  
Fukuoka, Japan  
<sup>2</sup>Fuzzy Logic Systems Institute, Kitakyushu-City, Fukuoka, Japan  
<sup>3</sup>Yaskawa Electric Corporation, Kitakyushu-City, Fukuoka, Japan  
<sup>4</sup>Department of Precision Engineering, The University of Tokyo, Japan

11:15	<b>ThOp8.2:</b> MEMS DEFORMABLE MIRROR WITH INTEGRATED BLACK SILICON APERTURE Tianbo Liu, David L. Dickensheets Montana State University, Bozeman, MT, USA	<b>215</b>
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