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# Micro+Nano Materials, Devices, and Systems

Benjamin J. Eggleton Stefano Palomba Editors

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# Introduction

In December 2013, the United Nations declared 2015 as the International Year of Light (IYL), recognizing the immense importance of light-based technologies in our lives, for our futures, and for the development of humankind.

In December 2015, the SPIE Micro+Nano Materials, Devices, and Applications symposium and the new Australian Institute for Nanoscience (AIN) at the University of Sydney's Camperdown campus offered the opportunity to celebrate the culmination of the IYL and heightened global awareness of the importance of light-based technologies, including nanoscience.

The SPIE symposium is an interdisciplinary forum for collaboration and learning among top researchers in all fields related to nano- and microscale materials and technologies. This 2015 event took place over 4 days, 6-9 December, and included both oral and poster presentations with a focus on nanostructured and biocompatible materials, medical and biological micro/nanodevices, micro/nanofluidics and optofluidics, nanophotonics for biology and medical applications, plasmonics, and solar cell technologies and fabrication.

The University of Sydney is Australia's first university with an outstanding global reputation for academic and research excellence. Located close to the heart of Australia's largest and most international city, the Camperdown campus features a mixture of iconic gothic-revival buildings and state-of-theart teaching, research, and student support facilities. The University of Sydney attracts many of the most talented students in Australia drawn by its range of quality degrees and strong track record of research programs. The University's academics are leaders in their disciplines nationally and internationally, driving major research initiatives.

Sydney is Australia's truly international city and one of the world's most iconic and livable cities in the world, with plenty of open space, famous beaches, glittering harbour, waterways and bushland, great climate and vibrant culture rich of entertainment, cultural activities, and sporting events. Sydney is at the heart of Australia's economy, and is ranked first in the Asia Pacific in terms of intellectual capital and innovation. Sydney offers a safe and secure environment for individuals and families, with world-class health care, education, transport and telecommunications with a multicultural environment as over a third of Sydney's population was born overseas.

> Benjamin J. Eggleton Stefano Palomba