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Nanophotonics VII

David L. Andrews
Angus J. Bain
Jean-Michel Nunzi
Andreas Ostendorf
Editors

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Introduction

The Photonics Europe conference on Nanophotonics continues to register a significant presence on the international research stage. This year the symposium returned to Strasbourg, its home up to 2008, and in spite of industrial action affecting both local and international rail services, participation was in every respect significantly higher than in 2016. The Nanophotonics conference, seventh in the biennial series, attracted its highest ever number of submissions, and ran a full week comprising a busy schedule of 15 high quality lecture sessions, together with 80 posters. The presentations represented the full span of an evolving, highly distinctive and broadening subject area.

Nanophotonics addresses the many physical systems and interactions in which optical characteristics are very substantially modified—and in some cases become almost entirely determined—by nanoscale features. Here, the character of optical propagation and measurement can involve a complex interplay of structural, spectroscopic, electromagnetic, electronic and quantum optical features. An increasingly extensive range of structures is being actively studied: in addition to 'conventional' nanomaterials of organic, semiconductor and biomolecular constitution, an ever increasing number of studies focus on the photonic properties of 2D materials, metamaterials, and plasmonics, with a wide range of applications including sensing, imaging, particle tracking and optical components for IT systems. These and many more areas of research activity are represented in these Proceedings.

We are pleased to thank our all of invited international speakers for eminently stimulating lectures to launch each session. It is also a pleasure to report that not only were all of the oral presentations of a consistently high standard—as was duly reflected in sustaining high audience counts; the posters were also uniformly excellent. The level and quality of student participation in the meeting was especially encouraging, and we were delighted to be able to award two prizes for the best student presentation to **Quantitative polarimetric studies of plasmonic quasicrystals** [10672-98] and **Enhancing transverse spin and transverse spin momentum in micro- and nano-optical systems** [10672-107].

It is a pleasure to thank all who contributed to the meeting; those who presented papers and delivered high quality manuscripts for these proceedings, and fellow members of the Program Committee who chaired sessions and generally helped draw the conference together. Finally, we record sincere thanks to all of the members of the SPIE support staff, for uncompromising and characteristic professionalism, enthusiasm, and above all, for their keen support. This was both a highly enjoyable and productive conference and we look forward to returning to Strasbourg for Photonics Europe 2020.

David L. Andrews
Angus J. Bain

