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Jean-Claude Kieffer
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Introduction

It is with great pleasure we welcome you to the proceedings of the SPIE supported conference, Photonics North 2012, held 6–8 June 2012 in Montréal. This was yet another successful year for Photonics North, with more than 300 abstracts, attendees from 18 countries, and 40 exhibitors with a visiting delegation from China. This year's Conference drew a large audience and a very broad spectrum of research areas has been covered.

We were greatly honored to have Prof. Katarina Svanberg delivering the keynote lecture on his contributions to laser light interaction with biological tissues. The societal importance of the work on photodynamic therapy and tissue spectroscopy was obvious from her wonderful presentation.

Photonics North hosted several successful sessions including Biomedical Infection, Bio-sensors, Optical Communications, Optical Design and Simulation, Green Energy, Lasers and Processes, Nonlinear Optics, Ultrafast Photonics and Nano-optics. 70 invited speakers presented fascinating sides of optics and photonic. We were honored to have Prof. Bill Shillue from National Radio Astronomy Observatory present a plenary lecture at the banquet on the photonic technologies in the Atacama large millimeter array project. Prof. Laurent Sarger gave an illuminating plenary talk on the photonics in the Aquitaine Region in France and its impact on economic development.

These proceedings show the diversity of topics, the leading edge researches and the enabling technologies that define photonics in Canada. The world community attending the meeting reflects the relevance of the Photonics North forum as it continues to remain an important networking and scientific platform serving not only North America but also the wider photonics community.

Jean-Claude Kieffer