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Introduction

Advanced Laser Technologies 2007 (ALT-2007) was held in Levi, Finland, September 3–7, 2007. This conference followed the traditions of the previous 14 ALT conferences held once a year in different countries since 1993, and focused on the recent developments and advances in laser technologies and their applications.

Like all preceding meetings of this series, this well-attended conference brought together a remarkable group of physicists and engineers from many countries of the world. They presented and vigorously discussed altogether 73 oral papers and 55 poster contributions. Fifty-three manuscripts, based on the work of those presentations, were selected to be published in this volume.

The key topics of ALT-2007 included but were not limited to nanophotonics, biophotonics, pico- and femtosecond laser pulses generation and applications, photoacoustics, optical tomography, lasers and laser systems, laser-matter interaction and nonlinear processes, smart sensors and optical MEMS, micro-optics, and laser measurements.

The success of this and the preceding conferences on advanced laser technologies, and the noteworthy progress that is being made in this field by many research groups in different countries substantiate the necessity of further discussions of these and related topics at future meetings.

Risto Myllylä
Alexander Priezzhev
Matti Kinnunen
Vladimir Pustovoy
Mikhail Kirillin
Alexey Popov