Metamaterials II

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Editors

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Introduction

Today, metamaterials attract great attention due not only to the cutting-edge research on invisibility cloaks and the superlensing devices exceeding the diffraction limit, but also due to the developing technologies that will likely transform optics’ common applications and will affect the techniques developed by the next generation of engineers.

In contrast to conventional materials, metamaterials offer new and unique features that are extremely attractive for commercial applications such as antennas. The next generation of hand-held devices is believed to be the leader in major technological breakthroughs.

This second symposium in a series of conferences on metamaterials provided an updated overview of recent activities in this field including:

- recent advances in scaling metamaterials with artificial magnetic response toward optical frequencies;
- novel concepts beyond the limits of the classical concepts;
- recent achievements in plasmonics and microwave technology in the investigation of tunable and nonlinear metamaterials;
- device applications and progress in modeling of metamaterials.

This conference was one of nine conferences held at the SPIE Congress on Optics and Optoelectronics organized in Prague by the SPIE Czech Chapter and SPIE Europe, and it was designed to bring together leading scientists to create an important regional forum addressing the most important developments in the field of photonics.

As chairs of this meeting, we would like to express our thanks to all those participants who contributed through their presentations and to the programme committee members.

Vladimir Kuzmiak
Peter Markos
Tomasz Szoplik