

Introduction

A conference entitled 'Microtechnologies for the next Millennium' must include a focus on nanotechnology, a field which has certainly matured beyond its infancy. Novel fabrication techniques and hybridization of different materials reveal a wealth of new applications and experimental findings that could not have been envisioned a few years ago.

The SPIE Europe Nanotechnology conference 2009 brought together research scientists, engineers, and visionaries from this exciting field. In view of the fact that nanotechnology was not represented by a single headline, six different sessions were set up which gave special emphasis to technologies and techniques that are serving to bridge the fields of electronics, mechanics, photonics, and biology (soft matter, generally).

The following selection of papers nicely reflects the state of nanotechnology and nanoscience in general. I personally wish to thank all the attendees and authors for their great mix of theories, mature scientific results, and visionary ideas which made the conference a true 'must attend' event for players in the field.

Achim Wixforth