



# **APPLIED ELECTROMAGNETICS, WIRELESS and OPTICAL COMMUNICATIONS**

**Proceedings of the 8th WSEAS International Conference on  
APPLIED ELECTROMAGNETICS, WIRELESS and OPTICAL  
COMMUNICATIONS (ELECTRO '10)**

**Penang, Malaysia, March 23-25, 2010  
Supported by Universiti Kebangsaan Malaysia**

Recent Advances in Electrical Engineering  
A Series of Reference Books and Textbooks

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## **Preface**

This year the 8th WSEAS International Conference on APPLIED ELECTROMAGNETICS, WIRELESS and OPTICAL COMMUNICATIONS (ELECTRO '10) was held in Penang, Malaysia, March 23-25, 2010. The conference remains faithful to its original idea of providing a platform to discuss applied electromagnetics, mathematical methods for problems of electromagnetic fields, mathematical physics, computational techniques, microwaves, antennas, radar, scattering, propagation, channel modeling, indoor propagation, satellite communications, network modeling, routing and switching technology, optical networking technologies, optical fibers, semiconductor optical amplifiers, active and passive optical components, signal processing for communications, channel estimation and cancellation, telecommunications standardization, satellite antennas, mobile communications, mobile satellite systems, microcellular communications, source compression, videoconferencing applications, teleinformatics, communication networks, multiuser detection and interference, array processing, traffic modeling and resource management, internet technologies, broadband communications, solid state electronics for communications etc. with participants from all over the world, both from academia and from industry.

Its success is reflected in the papers received, with participants coming from several countries, allowing a real multinational multicultural exchange of experiences and ideas.

The accepted papers of this conference are published in this Book that will be indexed by ISI. Please, check it: [www.worldses.org/indexes](http://www.worldses.org/indexes) as well as in the CD-ROM Proceedings. They will be also available in the E-Library of the WSEAS. The best papers will be also promoted in many Journals for further evaluation.

A Conference such as this can only succeed as a team effort, so the Editors want to thank the International Scientific Committee and the Reviewers for their excellent work in reviewing the papers as well as their invaluable input and advice.

The Editors





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