





# **RECENT ADVANCES in CIRCUITS, SYSTEMS, SIGNAL and TELECOMMUNICATIONS**

**5th WSEAS International Conference on CIRCUITS, SYSTEMS,  
SIGNAL and TELECOMMUNICATIONS (CISST '11)**

**Puerto Morelos, Mexico  
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**Preface**

This year the 5th WSEAS International Conference on CIRCUITS, SYSTEMS, SIGNAL and TELECOMMUNICATIONS (CISST '11) was held in Puerto Morelos, Mexico, January 29-31, 2011. The conference remains faithful to its original idea of providing a platform to discuss molecular electronics, molecular computing, metabolic networks, microelectronics, optoelectronic devices, laser and optical systems, amplifiers, non-linear circuits, semiconductors, logic synthesis, digital filters, superconductivity circuits, video technologies, systems theory, robotics, hybrid systems, hierarchical control, man-machine interaction, cybernetics, microprocessors, unmanned vehicles, signal reconstruction, broadband audio coding, evolutionary computation, microwave theory and techniques, microwave superconductivity, antennas, diffraction, applied electromagnetics, aerospace systems 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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