



CIRCUITS THEORY and APPLICATIONS

**Proceedings of the
11th WSEAS International Conference on CIRCUITS
(part of the 2007 CSCC Multiconference)**

Agios Nikolaos, Crete Island, Greece, July 23-25, 2007

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Preface

The book you are currently holding contains the Proceedings of the 11th WSEAS International Conference on CIRCUITS (July 23-25, 2007), which is a part of the 11th WSEAS CSCC (Circuits, Systems, Communications, Computers) Multiconference, Agios Nikolaos, Crete Island, Greece, July 23-28, 2007.

As the various branches of engineering advance, the studying of circuits holds an increased interest. New problems need to be addressed as new real life applications appear. Thus, electronic technology, information technology and communications technology require new modern circuitry and efficient electric circuits, the implementation of which is a challenge for the electrical and electronic engineers of today.

The CSCC conference is organized annually by the World Scientific and Engineering Academy and Society (WSEAS) in collaboration with important university laboratories, academies and research centers. In 2007 the CSCC international multiconference was organized by WSEAS in collaboration with IARAS (<http://www.iaras.org>) and the Computer Science Laboratory of Hellenic Naval Academy. Several other universities laboratories contributed with special sessions and plenary lectures as one can see below. In 2008 it will be organized by WSEAS and Universidade do Algarve in Algarve, Portugal (June 11-13, 2008).

A variety of topics constituted the focus of paper submissions. Prominent lectures provided key-note speeches for the conference. Moreover, special sessions were organized, and invited lectures were given by well-known researchers.

For this CSCC conference, the Chairmen of the International Scientific Committee were:

Prof. Nikos E. Mastorakis, Hellenic Naval Academy, GREECE, Prof. Stamatios Kartalopoulos, University of Oklahoma, USA, Prof. Panos Pardalos, University of Florida, USA, Prof. Argyrios Varonides, University of Scranton, USA, Prof. Ioannis Pountourakis, National Technical University of Athens, GREECE, Prof. Valeri Mladenov, Technical University of Sofia, BULGARIA, Prof. Zoran Bojkovic, Technical University of Belgrade, SERBIA, Prof. Emmanuel Antonidakis, Techn. Educational Institute of Crete, GREECE

The Plenary Speeches of CSCC'07 were:

- *A New Look at Convexity, Duality, and Optimization*
by Prof. Dimitri Bertsekas, MIT (Massachusetts Institute of Technology Lab. for Information and Decision Systems Cambridge, MA 02139, USA)
- *Key Technologies in Next Generation Optical Networks*
by Prof. Leonid Kazovsky, Stanford University, USA
- *Numerical and Parametrical Optimisation for the Simulation of a Turbulent Combustion Phenomenon in a Well-Stirred Reactor in Steady State Conditions*

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We would like to thank all members of the organizing laboratories for their contribution to the organization of the conference.

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In addition, the papers of this book are permanently available to all the scientific community via the WSEAS E-Library. Another additional feature of CSCC'07 was that the WSEAS society provided the participants with a username and password without an expiry date for on-line access in the WSEAS Conference proceedings (1996 -...).

Expanded and enhanced versions of papers published in these conference proceedings are also going to be considered for possible publication in one of the WSEAS journals that participate in the major International Scientific Indices (Elsevier, Scopus, EI,

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We cordially thank all the people of WSEAS for their efforts to maintain the high scientific level of conferences, proceedings and journals.

The Editors

11th WSEAS International Conference on CIRCUITS

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