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Call for Papers

ICECS 2004

11th IEEE International Conference on Electronics,
Circuits and Systems

Monday-Wednesday, December 13-15, 2004,

Tel-Aviv, Israel

<http://www.icecs2004.org>

The 11th IEEE International Conference on Electronics, Circuits, and Systems – ICECS 2004 will be held in Tel-Aviv, Israel on December 13-15, 2004. The Conference will be an inspiring forum for the exchange of ideas and results. It will include regular technical sessions, plenary sessions, short courses, tutorials, and special sessions. Regular sessions will include poster and lecture sessions. Prospective authors are invited to submit their manuscripts reporting original work, as well as proposals for special sessions and tutorials, in all areas of electronics, circuits and systems.

Topics of Interest

Topics include, but are not limited to, the following:

- Analog Circuits and Signal Processing
- General Circuits and Systems
- Digital Signal and Image Processing
- VLSI ICs and Systems
- Computer Aided Design
- Multimedia and Communications
- Neural Systems
- Control Systems
- Biomedical and Industrial Applications
- Sensory Systems

Focus Areas of the Conference

- **System-on-a-chip**
- **Nano technologies and alternatives to silicon**
- **Biotechnology**
- **RF CMOS circuits**
- **Integration between design, test and manufacturing**
- **High-speed and opto-electronic circuits**
- **Integrated Sensors**

Tutorials: The tutorials will be held on Sunday, December 12.

Author's Schedule

Deadline for submission of papers:	April 16, 2004
Notification of acceptance:	May 29, 2004
Deadline for camera-ready copies:	June 15, 2004
Deadline for author registration:	June 16, 2004

Venue

Tel-Aviv, an easy city to visit due to its highly developed transportation system, is indeed the cultural, financial and commercial heart of Israel. A cosmopolitan center on the seafront, with fine sandy beaches, a marina, restaurants, pubs and culture on tap every day of the week. Tel-Aviv is a 40-minute drive on a modern highway, from the holy city of Jerusalem, the center for the three religions, and is an hour's drive from Haifa, set in the beauty of the Carmel mountain range that acts as a backdrop to the sparkling golden dome of the Baha'i Shrine and Gardens.

Detailed List of Topics

1. Analog Circuits and Signal Processing

- 1.1. Analog circuits and filters
- 1.2. Switched capacitor and switched current techniques
- 1.3. Analog and mixed signal processing
- 1.4. Data conversion and sigma-delta modulation
- 1.5. Low-power and low-voltage circuits
- 1.6. Radio frequency circuits
- 1.7. Log-domain circuits

2. General Circuits and Systems

- 2.1. Linear and nonlinear circuits and systems
- 2.2. Chaos and applications
- 2.3. Distributed circuits and systems
- 2.4. Power electronics circuits and systems

3. Digital Signal and Image Processing

- 3.1. Digital filters and filter banks
- 3.2. Wavelets and multi-rate signal processing
- 3.3. Adaptive signal processing
- 3.4. Multidimensional systems
- 3.5. Fast computations for signal processing
- 3.6. Speech processing and coding
- 3.7. Image processing and coding

4. VLSI ICs and Systems

- 4.1. Analog circuit design
- 4.2. Low-power and high-speed digital design
- 4.3. Testing: analog, digital and mixed
- 4.4. FPGA: Design and test
- 4.5. Microsystems and applications
- 4.6. Processor architectures
- 4.7. Design for deep sub-micron technology
- 4.8. Reconfigurable and self-testable architectures
- 4.9. VLSI technology
- 4.10. System-on-chip: Design and Integration

5. Computer-Aided-Design

- 5.1. Interconnect and low-power driven physical design
- 5.2. Logic synthesis and layout-driven logic synthesis
- 5.3. High level synthesis and hardware/software co-design
- 5.4. Formal verification
- 5.5. Device, circuit and system modeling and simulation
- 5.6. Integration between design, test and manufacturing
- 5.7. Synchronization methodologies
- 5.8. Linear and nonlinear optimization
- 5.9. Graph theory and optimization algorithms

6. Multimedia and Communications

- 6.1. Video and multimedia technology
- 6.2. Human-computer interaction
- 6.3. Interface design
- 6.4. Visual languages
- 6.5. Signal processing and communications
- 6.6. Computer communications
- 6.7. High-speed and opto-electronic circuits and systems

7. Neural Systems

- 7.1. Neural networks
- 7.2. Cellular neural networks
- 7.3. Fuzzy logic and circuits

8. Control Systems

- 8.1. Industrial automation
- 8.2. Robotics
- 8.3. Control systems and applications

9. Biomedical and Industrial Applications

- 9.1. Biotechnology
- 9.2. Medical imaging
- 9.3. Bionics
- 9.4. Biomechanics and BioMEMS

10. Sensory Systems

- 10.1. Image and vision systems
- 10.2. CMOS and CCD imaging circuits
- 10.3. Non-visible image sensors systems
- 10.4. Micro-Opto-Electro-Mechanical Systems

Paper Selection Criteria

All submissions must be in **English**. An international review panel will select papers to be presented based on:

- **Originality:** The paper must be unique and significant.
- **Quantitative content:** The summary should give an explicit description of the work with complete supporting data and adequate reference to the existing literature.
- **Clarity of presentation:** The writing and figures must clearly communicate the author's purpose and results.

Paper Submission

In 2004, ICECS will accept **electronic submissions only** in pdf or postscript format. Papers may be up to 4 pages long, including figures and references, in two-column IEEE format, with a font size of 12pt. Paper submission will be web based. The formatting and submission procedures can be found on the conference web site <http://www.icecs2004.org>. Submission of a paper implies a commitment to present the paper if accepted. Notification of acceptance will be sent by May 15, 2004. At least one of the authors must register for the conference by June 2, 2004, for the paper to be published.