



# 2014 IEEE



## Compound Semiconductor IC Symposium



INTEGRATED CIRCUITS and DEVICES in  
GaAs, InP, GaN, SiGe, and other compound semiconductor and CMOS technologies



October 19–22, 2014

Hyatt Regency La Jolla at Aventine, San Diego, California, USA



Sponsored by the IEEE Electron Devices Society  
Technically co-sponsored by the Solid State Circuits Society  
and the Microwave Theory & Techniques Society



## BREAKING NEWS - CALL FOR PAPERS

### 2014 CSIC Symposium

Starting in 1978 as the GaAs IC symposium, CSICS has evolved to become the preeminent international forum for developments in compound semiconductor integrated circuits, embracing GaAs, InP, GaN, SiGe, as well as nanoscale CMOS technology. Coverage includes all aspects of the technology from materials issues, device fabrication and modeling through IC design and testing, high volume manufacturing, and system applications. Specific technical areas of interest include:

- Innovative device concepts in emerging technologies
  - GaN, InP, III-V on Si, Ge on Si, Graphene
- Analog, RF, mixed-signal, mm-wave, THz circuit blocks and ICs in III-V, CMOS, and SiGe BiCMOS
- Power conversion circuits and technologies
- Optoelectronic and photonic devices and OEICs
- System applications
  - Wireless handsets and base stations
  - Vehicular and military RADAR
  - High-speed digital systems
  - Fiber optics and photonics
- Device and circuit modeling / EM and EDA tools
- Thermal simulation and advanced packaging of high-power devices and ICs
- Device and IC manufacturing processes, testing methodologies, and reliability

### Symposium Highlights

High quality technical papers will be selected from submissions for oral presentation and publication in the Symposium Digest. Invited papers and panel sessions will complete the program. Extended versions of select papers from the Symposium will be published in a special issue of the *IEEE Journal of Solid State Circuits*.

### Primer Courses

On Sunday, CSICS will provide two separate primer courses: “Fundamentals of A/D Converters” taught by Dr. H. Pan (Broadcom) and “Introduction to Si RFIC Design” taught by Dr. W. Khalil (Ohio State). They are intended for participants of all technical backgrounds who wish to learn or refresh their knowledge in the key aspects of ADCs from quantization fundamentals to circuit design or the fundamentals of designing the principal circuit building blocks in radio and radar SOCs. The primer is an excellent way to start the symposium and is guaranteed to enhance attendee appreciation of the technical program.

### Short Courses

On Sunday, CSICS is proud to present two short courses: “GaN HEMT Device Modeling” and “Fundamentals of Power Conversion and Envelope Tracking.” Taught by leading experts, they are intended for both technologists and IC designers who seek a comprehensive understanding of the latest trends and techniques in GaN technology and circuit design. Organizer: Harris Moyer, HRL Laboratories, Ph: +1-310-317-5784, E-mail: [hpmoyer@hrl.com](mailto:hpmoyer@hrl.com).

**Deadline for Electronic Receipt  
of Papers is  
Close of Business, July 18, 2014**

Authors must submit a complete paper (4 pages long including figures and other supporting material) of results not previously published or not already accepted by another conference. Papers will be selected on the basis of the content and measured results.

**The abstract must concisely and clearly state:**

- a) **The purpose of the work**
- b) **What specific new results have been obtained**
- c) **How it advances the state-of-the-art or the industry**
- d) **References to prior work**
- e) **Sub-committee preference:**
  - **Advanced Devices and Modeling**
  - **Analog, RF, and Microwave ICs**
  - **mm-Wave and THz ICs**
  - **High-Speed digital, Mixed-Signal & Optoelectronic ICs**

The paper must include: the title, name(s) of the author(s), organization(s) represented, corresponding authors' postal and electronic addresses, and telephone number. A paper template is available from [www.csics.org](http://www.csics.org). Please indicate your preference for subcommittee review. The program committee will honor the authors' preference where possible, but reserves the right to place the paper in other review categories.

**All company and governmental clearances must be obtained prior to submission of the paper.**

Authors must submit their camera ready papers in PDF format electronically using the [www.csics.org](http://www.csics.org) web page. They will be informed regarding the results of their submissions by July 23, 2014. Authors of accepted papers will be required to submit to the IEEE their final camera-ready paper on or before July 25, 2014 for publication in the Symposium Technical Digest. The accepted papers may be used for publicity purposes. Portions of these papers may be quoted in magazine articles publicizing the Symposium. **Please note on the paper if this is not acceptable.**

Further questions on paper submission may be addressed to the Symposium Technical Program Chair:

Charles Campbell  
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E-mail: [ccampbell@tqs.com](mailto:ccampbell@tqs.com)

All Symposium information, including paper submission instructions and a link to our paper submission address is available on the CSICS website at:

**[www.csics.org](http://www.csics.org)**

## 2014 Compound Semiconductor IC Symposium Exhibition

As in past years, the Symposium will sponsor an exhibition of products from various vendors of materials, IC products, processing equipment, test equipment, CAD tools, and foundry services specifically addressing the Compound Semiconductor industry. Numerous vendors will be on-hand to discuss their products and to answer questions.

Inquiries concerning the exhibits should be addressed to:

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The following members of the Technical Program Committee are available for guidance or for answering questions regarding paper preparation:

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