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## First Call For Papers

### 2023 IEEE 15<sup>th</sup> International Conference on ASIC

Oct. 24-27, 2023, Platinum Hanjue Hotel  
Nanjing , China

**Sponsored by**  
**Co-Sponsored by**

*IEEE Beijing Section*  
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**2023 IEEE 15<sup>th</sup> International Conference on ASIC (ASICON 2023)** will be held in Nanjing, China, during Oct.24-27, 2023. The conference is intended to provide an international forum for Integrated circuit designers, ASIC users, system integrators, IC manufacturers, process and device engineers, and CAD/CAE tool developers to present their latest progress, development and research results in their respective fields. The four-day event features keynote speeches, invited talks, regular paper presentations and tutorials, delivered by leading experts in the respective fields, on state-of-the-art Integrated circuits, design methodologies, devices, processes and manufacturing technologies. The Excellent Student Paper Award & Outstanding Young Scholar Paper Award will be announced at the conference. Additionally, an exhibition on EDA tools, foundry technologies, IC processing/testing facilities, and novel ASIC products will be held during the conference.

### **The Scope of the Conference**

Papers are solicited in, but not limited to, the following:

#### **I. Integrated Circuits and Design Techniques**

- [1] Analog IC
- [2] Digital IC
- [3] Wireless, Wireline telecommunication and Optic Communication IC
- [4] Memory
- [5] Sensor, Image Processing and Bio-medical IC

#### **II. FPGA**

- [6] FPGA and DSP
- [7] Special application IC
- [8] Design for Testing

#### **III. CAD Techniques**

- [9] Circuits Simulation, Synthesis, Verification and Physical Design
- [10] CAD for System, Design for Manufacturing and Testing

#### **IV. New Techniques, New Processing, New Devices and Their Applications**

- [11] MEMS Techniques
- [12] Nano-electronics and Giga-scale Systems
- [13] New Devices
- [14] New Processing
- [15] Processing Modeling & Simulation

#### **V. Other VLSI Design and Device Related Topics**

- [16] Other Devices Related Topics
- [17] Other VLSI Design Related Topics

### **Keynote Speeches**

**Session K1-1: Technology Innovations at the heart of Engineering Humanitarian Solutions**

**Time: 9:00-9:45, Oct.25, 2023, Wednesday**

**Speaker: Dr. Rakesh Kumar**

**IEEE Life Fellow, IEEE TA Hall of Honor Chair, IEEE Roadmaps Chair**

**President, Technology Connexions, Inc, USA**

**Session K1-2: Let the Plants Do the Talking: Smart Agriculture by the Messages Received from Plants and Soil**

Time: 9:45-10:30, Oct.25, 2023, Wednesday

Speaker: Prof. Danilo Demarchi  
Politecnico di Torino, Italy

**Session K2-1 Oxide Thin-Film Transistors and Integrations**

Time: 10:45-11:30, Oct.25, 2023, Wednesday

Speaker: Prof. Aimin Song  
University of Manchester, UK

**Session K2-2 Efficiency, Resilience, and Versatility in Memristive Neuromorphic Systems for AI on the Edge**

Time: 11:30-12:15, Oct.25, 2023, Wednesday

Speaker: Prof. Gert Cauwenberg  
University of California, San Diego, USA

**Session K3-1 RF Acoustic Wave Devices in Mobile Communications --- Aliens from Jupiter**

Time: 8:30-9:15, Oct.26, 2023, Thursday

Speaker: Prof. Ken-ya Hashimoto (Fellow of IEEE)  
University of Electronic Science and Technology of China

**Session K3-2 The back-gate of UTBB FDSOI transistor : a magic knob for analog and mixed cells**

Time: 9:15-10:00, Oct.26, 2023, Thursday

Speaker: Prof. Gilles Jacquemod  
Université Côte d'Azur, France

**Session K4-1 Sub-Terahertz Communication and Its Future Towards 6G**

Time: 8:30-9:15, Oct.27, 2023, Friday

Speaker: Prof. Minoru Fujishima  
Hiroshima University, Japan

**Session K4-2 Terahertz-chip-scale systems for Intelligent Sensing and 6G Communication**

Time: 9:15-10:00, Oct.27, 2023, Friday

Speaker: Prof. Kaushik Sengupta  
Princeton University, USA

## ***Papers Submission***

Prospective authors are requested to submit full-length papers in English of no more than four pages using the proceedings format, double columned, 10pt fonts including figures, tables and references. For further information on the paper format, please refer to "[template](#)". The papers are submitted in their final form, if accepted, will be published as submitted. All submissions must be made at the conference website. Authors who want to compete for the Excellent Student or Outstanding Young Scholar Paper Award should apply at the conference website. Detailed instructions for paper preparation and submission can be found at conference website. **Tutorial proposals are also invited.**

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**For further information please visit conference web site:**

**<http://www.asicon.org>**

**Deadline of papers submittal is June 30, 2023**  
**Paper acceptance/rejection will be informed by Aug. 15, 2023**