

# **Antennas and Propagation (APCAP'2022)**

The 10th Asia-Pacific Conference on Antennas and Propagation (APCAP 2022) will be held again in Xiamen, China, on September 26-29, 2022. APCAP2022 is organized by Xiamen Institute of Electronics (XMIE) and Antenna Society of Chinese Institute of Electronics (CIE), co-organized by South China University of Technology, Xiamen University, Southeast University, Fuzhou University, and Jimei University.

The Asia-Pacific Conference on Antennas and Propagation (APCAP) provides an international forum to report the latest progress in the research and development of innovative antenna technology and radio wave propagation.

The APCAP was successfully inaugurated in Singapore in 2012 and subsequently held in Chiangmai in 2013, Harbin in 2014, Bali in 2015, Kaohsiung in 2016, Xi'an in 2017, Auckland in 2018, Inchon in 2019, and Xiamen (on-line) in 2020. The APCAP 2022 is planned to be in-person and will offer a rich, high-quality scientific program with keynote and invited speakers from all over the world. It will be a platform for not only exchanges of innovative ideas but also opportunities for collaboration among people from academia, industry, and governments.

The conference will cover a wide range of topics related to antenna technology, propagation, and electromagnetic theory. Prospective authors are invited to submit original contributions to the paper submission site at **www.em-conf.com/apcap2022**. Proposals for special sessions, workshops, and short courses are also invited and welcome.

Accepted papers will be submitted for inclusion into IEEE Xplore subject to meeting IEEE Xplore's scope and quality requirements.

### **Important Dates**

Proposals for Special / Focused Sessions,<br/>Workshops and Tutorials, Industrial ForumsJune 20, 2022Preliminary Paper Submissions<br/>(2 Pages PDF Only)June 20, 2022

Notification of Acceptance

July 1, 2022

**Final Paper Submission** 



Quan Xue, SCUT Donghui Guo, Xiamen Univ. Wei Hong, Southeast Univ. Zhi Ning Chen, NUS Zhizhang David Chen, Fuzhou/Dalhousie Univ.

#### Int. Advisory Committee

Zhenghe Feng, Tsinghua Univ. Shuxi Gong, Xidian Univ. Xianliang Wu, Anhui Univ. Qing Huo Liu, Duke Univ. Qing-Xin Chu, SCUT Cunxiang Wang, Ant. Soci. CIE Wenquan Che, SCUT

#### **TPC Co-Chairs**

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Publicity Co-Chairs Chun-Xu Mao, Uni. Surrey Baigiang You, Xiamen Univ.

**Finance Co-Chairs Xiaowei Zhu**, *Southeast Univ.* **Shan He**, *XMIE* 

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Local Comm. Co-Chairs Jiyang Dong, Xiamen Univ. Junhui Ou, SCUT Qiubo Ye, Jimei Univ.

Secretaries Yao Lu, Maitekang

Webmaster Chao Guo, Maitekang





**Conference Topics** 

## 2022 IEEE 10th Asia-Pacific Conference on Antennas and Propagation (APCAP'2022)

September 26-29, 2022, Xiamen, China, www.em-conf.com/apcap2022

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#### Antennas

- Analysis, design, and development of various antennas
- Design of wide-band antennas and small antennas
- Empirical, theoretical, and computational models of antennas and arrays
- Material properties and their applications in antennas
- Reconfigurable and tunable antennas, optical and nano-antennas
- Antenna arrays and MIMO systems
- Signal processing for antennas
- Phase-arrays and digital-arrays for 5G/6G
- Antenna-in-package and antenna-on-chip
- Al-assisted antenna designs and testing

#### **Electromagnetic Wave Propagation**

- Theoretical and computational methods of predicting wave propagation and sensing
- Characterization of propagation channels
- Applications in wireless communications, radar, imaging, sensing, and robots
- Multiple antenna systems for spatial, polarization, pattern, and other diversity applications

#### **Measurements**

 Measurement, specification, and standards of electrical quantities

- Measurement techniques for antennas, electromagnetic radiation, propagation, and scattering
- Display and visualization of electromagnetic fields and currents
- Near-field and compact-range measurements and novel measurement techniques
- Design of microwave absorbers and material characterization

#### **Electromagnetics**

- Fundamental and advanced theory, analytical and numerical solutions
- Radiation, scattering, radar cross-section, propagation, and interaction with all media
- Inverse scattering, target identification, positioning, and localization
- Novel electromagnetic and artificial materials
- Computational electromagnetics, fast algorithms, and CAD packages

#### **Microwaves, Millimeter Waves, and THz**

- Solid-state circuits, low-noise circuits, and highpower circuits, monolithic integrated circuits, passive circuits, packaging, interconnects, MCMs, and MEMS
- Ferrite and SAW components, superconducting components & technology
- Microwave-Optical design, high-speed digital circuits, signal integrity (SI), sub-millimeter wave techniques
- THz technology, measurement, and imaging

Authors are requested to submit a preliminary paper with a maximum of 2 pages in length, including title, author's affiliation, abstract, figures, and references.

The submission must be in electronic format (PDF). A Word template is available on the symposium website. No hardcopies will be accepted.

Papers considered for the Student Paper Prize are expected to be predominantly the work of the student. Papers co-authored by a student and his advisor are eligible, provided the student is the principal author and also the presenter. Please indicate in your electronic submission if you want to be considered for the Student Paper Prize. Accepted Papers

Exhibition

Notifications of paper acceptance and the necessary information to electronically submit the final version of the paper will be sent to the authors. Final papers shall be **2 pages** long, including figures, tables, and references.

The Technical Exhibition has always been a main highlight of the conference. The exhibition offers an excellent opportunity for every person of the antennas and propagation community and anyone involved in technologies associated with antennas, RF, microwave instrumentation and analysis software, etc., to meet, gather and socialize internationally.

Exhibition contact: Xiaorong Shen, shenxiaorong@vtexpo.com.cn

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