



# Announcement and Call for Papers

## ISAPE 2018

The 12th International Symposium on Antennas, Propagation and EM Theory

December 3-6, 2018, Hangzhou, China

ISAPE, a serial symposium on antennas, propagation, and EM theory, always offers an active forum for exchanging creative ideas and experiences of the latest developments, designs in the areas of antennas, propagation, and electromagnetic theory for professors, researchers, engineers and excellent students all over the world. The 12th International Symposium on Antennas, Propagation and EM Theory, ISAPE 2018, will be held in Hangzhou, China. All prospective papers in the areas of antennas, propagation, electromagnetic theory, computational electromagnetic, and EMC are welcome. All papers accepted will be indexed by the INSPEC database and EI Compendex. **Paper submission deadline: October 10, 2018**

### SUGGESTED TOPICS

#### A. Antennas, Antenna Applications and Emerging Technologies

- A1. Antenna Theory
- A2. Antenna Feeds and Matching Circuit
- A3. Microstrip Antennas, Arrays and Circuits
- A4. Phased-array Antennas
- A5. Electrically Small Antennas
- A6. Adaptive, Active, and Smart Antennas
- A7. Multi-Band Antennas
- A8. Broadband/Ultra-wideband Antennas
- A9. Guided and Leaky Wave Antennas
- A10. Dielectric Resonator Antennas
- A11. Mutual Coupling in Antenna Arrays
- A12. Reconfigurable Antennas and Arrays
- A13. Reflector and Reflectarray Antennas
- A14. Antenna Measurements
- A15. FSS, Polarizers and Radomes
- A16. Biomedical Applications
- A17. MIMO Implementations and Applications
- A18. Mobile and PCS Antennas
- A19. Vehicular Antennas and Electromagnetics
- A20. Software-defined/Cognitive Radio
- A21. On-chip Antennas
- A22. Wireless Power Transmission and Harvesting
- A23. 3D Printed Antennas and Structures
- A24. Millimeter-wave and Sub-mm-wave Antennas
- A25. Terahertz, infrared, and Optical Antennas

#### B. Propagation & Related Topics

- B1. Mobile & Indoor Propagation & Modeling
- B2. Millimeter & Optical Wave Propagation
- B3. Propagation at THz Band
- B4. Earth-Space & Terrestrial Propagation
- B5. Radio Meteorology
- B6. Remote Sensing
- B7. SAR Polarimetry & Interferometry
- B8. Tunnel Propagation
- B9. Propagation in Ionized and Non-Ionized Media
- B10. Radio Astronomy
- B11. Ionospheric Modification
- B12. Earth Space Sounding
- B13. New Concept SAR
- B14. Propagation in Random and Complex Media
- B15. Propagation in Deep Space and Deep Sea
- B16. Propagation with Big Data and Artificial Intelligence

#### C. Electromagnetic Theory

- C1. Theoretical electromagnetics
- C2. Nonlinear electromagnetics
- C3. Transient fields and effects
- C4. Ultra-wideband electromagnetics
- C5. Bio-electromagnetics
- C6. Geo-electromagnetics
- C7. THz electromagnetics
- C8. Nano-electromagnetics
- C9. Electromagnetic interaction and coupling
- C10. Electromagnetic radiation, scattering and diffraction
- C11. Guided waves and wave-guiding structures
- C12. Frequency-selective surfaces and filters
- C13. Metamaterials and metasurfaces
- C14. 2D materials based structures
- C15. Electromagnetic bandgap materials
- C16. Electromagnetic absorbing materials
- C17. Electromagnetic imaging, inverse scattering and sensing applications
- C18. Electromagnetic stealth techniques
- C19. Electromagnetic measurements
- C20. Electromagnetic education

#### D. Computational Electromagnetics and High Performance Computing

- D1. Integral Equation Methods
- D2. Differential Equation Methods
- D3. Domain Decomposition Methods
- D4. Hybrid Techniques
- D5. Optimization Methods in EM Designs
- D6. Asymptotic & High-Frequency Techniques
- D7. Fast Direct Methods
- D8. Time Domain/Frequency Domain Methods;
- D9. Multiscale and Multiphysics Computation;
- D10. Low-Frequency Electromagnetics
- D11. Computational Bioelectromagnetics
- D12. Pre- & Post-Processing
- D13. Learning Methods in CEM;
- D14. High Performance Computing, Parallel and GPU Computations;
- D15. Inverse Scattering and Imaging
- D16. Novel Methods in CEM

## **E. Electromagnetic Environment Effects (E3), Electromagnetic Compatibility (EMC) & Protection**

- E1. Electromagnetic environment effects (E3)
- E2. Electromagnetic noise and interference sources
- E3. Computational electromagnetics & multiphysics in electromagnetic compatibility and protection
- E4. Model Validation
- E5. Electromagnetic radiation hazards
- E6. Intentional electromagnetic interferences
- E7. Lightning electromagnetic pulse (LEMP)
- E8. High power microwave (HPM)
- E9. High-power electromagnetics
- E10. Crosstalk
- E11. Signal integrity
- E12. Immunity and susceptibility
- E13. EMC standards
- E14. EMC design
- E15. EMC test and measurement technologies
- E16. Electromagnetic protection materials and devices
- E17. On-chip EMC and protection
- E18. EMC & protection in 3D integrated and packaging micro-systems
- E19. EMC & protection in wireless communication and radar systems
- E20. EMC & protection of warship platforms
- E21. EMC & protection of space platforms
- E22. EMC in automotive and high-speed trains
- E23. EMC in power transmission systems
- E24. Emerging EMC technologies

## **F. Wireless communication antennas and propagation related topics**

- F1. 5G channel measurement and models
- F2. Channel sounding and parameter estimation techniques
- F3. Channel emulation and test techniques
- F4. Massive MIMO channel propagation and models
- F5. Millimeter-wave propagation and antennas
- F6. Sub-mm-wave, terahertz, optical propagation and antennas
- F7. Vehicular to vehicular propagation and models
- F8. Vehicular antennas and electromagnetics
- F9. 5G multi-band and multiple-element antennas
- F10. Indoor, urban, terrestrial, and ionospheric propagation
- F11. Satellite channel measurement and models
- F12. Submarine channel measurement and models
- F13. High-speed train channel propagation and models
- F14. IoT scenario channel propagation and models
- F15. UAV scenario channel propagation and models
- F16. Radar, localisation and sensing
- F17. Standards progress and channel methodology

## **G. Others**

- G1. High-Power Microwave Applications
- G2. UWB & Impulse Applications
- G3. Ubiquitous Network Systems
- G4. Radio Technologies for Intelligent Transport Systems
- G5. Subsurface Sensing
- G6. MEMS-NEMS & MMIC
- G7. Passive & Active Circuits
- G8. Power Amplifiers, Linearization, & Active Components
- G9. Millimeter Wave & Sub-Millimeter Wave Components, Circuits & Systems
- G10. Signal Processing for Communications
- G11. Advanced Process, Packaging & Integration Technologies
- G12. 3D RF Technology
- G13. Electromagnetic Materials
- G14. Earthquake Precursors & Monitoring
- G15. Other related topics

### **SPONSOR:**

Chinese Institute of Electronics (CIE)

### **COSPONSORS:**

CIE Radio Propagation Society

CIE Antennas Society

### **ORGANIZERS:**

Hangzhou Dianzi University (HDU)

China Research Institute of Radiowave Propagation (CRIRP)

### **TECHNICAL CO-SPONSORS:**

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### **PROCEEDINGS:**

The ISAPE Proceedings CD of full papers with IEEE and the Library of Congress Catalog Numbers will be available to all delegates attending the conference. The papers accepted by the conference will be indexed by INSPEC database and EI Compendex.

### **WORKING LANGUAGE:**

The working language of the conference is English.

### **EMAIL OF ORGANIZATION COMMITTEE:**

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### **PAPER SUBMISSION:**

Information is available at the conference Web site:

**<http://www.rpsoc.cn/isape2018>**