

Commission B, Fields and Waves

Activity Report

November 2013 – October 2013

1 PIERS 2013 in Taipei

The 33th PIERS (Progress In Electromagnetics Research Symposium) in Taipei, Taiwan

PIERS provides an international forum for reporting progress and recent advances in all aspects of electromagnetics. Spectra range from statics to RF, microwave, photonics, and beyond. Topics include radiation, propagation, diffraction, scattering, guidance, resonance, power, energy and force issues, and all applications and modern developments.

1.1 Statistics

Date: March 25–28, 2013

Venue: Grand Hotel

Web page: <http://www.piers.org/>

Total submitted abstracts: 792

Final accepted abstracts: 552

Final accepted full-length papers: 287

Final Oral Talk: 372

Final Posters: 180

Oral Presented Talks: 352

Registered/Paid participants: 437 from 45 countries.

Local participants from Taiwan: 101

Others from: China:89, Japan:66, USA:25, France:19, Malaysia:14, Singapore 13, other 110 from 38 countries.

1.2 Technical sessions

- Nonlinear Propagation in Optical Systems
- Extended/Unconventional Electromagnetic Theory, EHD(Electro-hydrodynamics)/EMHD(Electromagneto-hydrodynamics), and Electro-biology 1
- Wireless Network and Applications
- MIMO Systems
- Novel Mathematical Methods in Electromagnetics
- Reconfigurable Antenna and Array Antenna
- Quantum Metamaterials
- Extended/Unconventional Electromagnetic Theory, EHD(Electro-hydrodynamics)/EMHD(Electromagneto-hydrodynamics), and Electro-biology 2
- Application of EM Field in Medicine and in Ecological Technologies
- Near-field Engineering, Surface-enhanced Raman Scattering and Their Applications
- Wireless Communication, Propagation Prediction
- Advanced Numerical Techniques in Electromagnetics
- Antennas for Wireless Communications
- Small Size and Low-profile Antennas

- Manipulating Wave with Metamaterials and Photonic Crystal 1
- Biological Effects and Medical Applications of Electromagnetic Energy 1
- Microwave Remote Sensing and Polarimetry, SAR, GPR
- Multi-scale and Multi-physics Computational Techniques
- Antenna Measurement
- Passive Waveguide Devices Theory and Numerical Modeling
- Resonators, Filters, Interconnects, Packaging, MMIC
- Manipulating Wave with Metamaterials and Photonic Crystal 2
- Electromagnetic Theory, Analysis and Simulation in Photonics
- Biological Effects and Medical Applications of Electromagnetic Energy 2
- Medical Electromagnetics, Medical Imaging, MRI
- Earth Electromagnetic Environment and Radiowaves Propagation & Scattering: Modeling, Observation and Measurements
- Present and Future of Terahertz Science & Technology, Including Applications in Radio-sciences
- Advanced Mathematical and Computational Methods in Electromagnetic Theory and Their Applications
- Wideband and Multi-band Antennas
- Optics and Photonics, Fiber, Lasers, Gyrotrons
- Electromagnetics of Gradient Nanostructures and Heterogeneous Media
- Plasmonic Nanophotonics 1 - Experiment and Fabrication
- Power Electronics
- EM Scattering Models and Applications
- Design and Simulation of Electromagnetic and Optical Devices
- Microstrip and Printed Antenna, Antenna Theory
- Electromagnetic Theory and Design on the Optical Dispersive Materials, Invisible Cloak and Photonic Crystals
- Microwave and Millimeter Wave Circuits and Devices, CAD
- Plasmonic Nanophotonics 2 - Analysis, Theory, Calculation and Simulation
- Intelligent Electronics
- RF, Microwave and Millimeter-wave Measurements
- SAR System and Signal Processing
- Computational Electromagnetics
- Antenna and EMC
- Biomedical Electromagnetic Instruments, EM Condensed Materials and Imaging and Education
- Electromagnetic Modeling, Inversion and Applications

2 URSI EMTS 2013

URSI EMTS 2013 (2013 URSI Commission B International Symposium on Electromagnetic Theory) in Hiroshima, Japan

EMTS2013 provides an international forum for the exchange of information on the progress of research in electromagnetic wave theory and related fields. Thanks to the intensive collaboration with the Commission B chaired by Prof. Giuliano MANARA, the local organizing committee formed by the Commission B of the URSI Japan Committee and the Technical Group on Electromagnetic Theory of IEICE and IEEJ as well as the members from Hiroshima City University, EMTS 2013 gave us a very attractive and rich symposium. In addition to The Young Scientist Award (YSA) program, the one-day "URSI Commission B School for Young Scientists" was planned for the first time at EMTS 2013 in Hiroshima.

2.1 Statistics

Date: May 20–24, 2013

Venue: International Conference Center Hiroshima

Web page: <http://www.uris-emts2013.org/>

Papers Submitted: 338 (114 from Japan, 224 from outside Japan)

Papers Accepted: 322 (110 from Japan, 212 from outside Japan)(including 9 withdrawals)

Papers Included in the Final Program/Proceedings: 313 (110 from Japan, 203 from outside Japan)

(Oral:283, Poster: 30)

Papers Presented at the Symposium: 290 (110 from Japan, 180 from outside Japan)

(Oral: 267, Poster: 23)

2.2 Technical sessions

- Electromagnetic Theory
- Mathematical Modeling of EM Problems
- Solution to Canonical Problems
- Scattering and Diffraction
- Integral Equation Methods
- High-Frequency Methods
- Hybrid Methods
- Numerical Frequency Domain Methods
- Numerical Time Domain Methods
- Electromagnetic Fast Solvers
- Guided Waves
- General Propagation
- Random Media and Rough Surfaces
- Complex Media and Metamaterials
- Inverse Scattering and Imaging
- Antennas: General Aspects
- Antenna Arrays
- Smart Antennas
- Ultrawideband Antennas

- Electrically Small Antennas
- Nanoelectromagnetics
- Interaction of Electromagnetic Fields with Biological Tissues
- Electromagnetic Compatibility/Electromagnetic Interference
- Multiphysics Electromagnetics
- Cognitive Radio and Software Controlled Antennas
- Electromagnetic Modeling of Human Body and Its Application to Dosimetry
- Microwave Metamaterials: Theory and Design for New Applications
- Millimeter-wave and THz Technologies for Wireless Communication
- Novel Mathematical Methods in Electromagnetics
- Topology and Electromagnetics
- Unusual Boundary Conditions and Their Realizations
- Electromagnetic Scattering/Reflection/Transmission/ Radiation in Structures Involving Metamaterials and Advanced Materials
- Analytical and Numerical Techniques for Modeling of Metamaterials
- Recent Advances in Metamaterials
- Periodic Structures - Frequency Selective Surfaces, Absorbers and Metamaterials
- Overcoming Fundamental Physics Limits with Active Metastructures
- New Development of Metamaterial Antennas and Transformation Electromagnetics
- Exotic Phenomena and Homogenization Theory of Metamaterials
- Wave Theory, Electromagnetic Properties and Applications of Composite Nanostructures and Nanomaterials
- Ultra Wideband Phased Arrays
- Inversion Methods for Electromagnetic Imaging and Applications
- Recent Advances of Electromagnetics in Medicine
- Advanced Computational Techniques for Multi-Scale and/or Multi-Physics Engineering Applications
- Wave Propagation in a Cellular Urban Environment
- Near-Field Coupling and Focusing: Theory, Techniques and Applications
- Wireless Power Transfer
- Fabry-Perot Resonant Cavity Antennas
- Electromagnetic Sensing for Underground Applications
- Adaptive Finite Element Methods

3 2013 IEEE APS and USNC-URSI National Radio Science Meeting

The 2013 IEEE International Symposium on Antennas and Propagation and USNC-URSI National Radio Science Meeting

The event represents the premier international symposium in the field of antennas and propagation. Its robust technical program is corroborated by many workshops, short-courses, a student paper contest, a student design contest.

3.1 Statistics

Date: July 7–12, 2013

Venue: The Hilton Orlando Lake Buena Vista in Lake Buena Vista, Florida, USA.

Web page: <http://www.2013apsursi.org/>

Number of oral presentations:

Number of poster presentations:

Oral contributions from Japan:

Poster contribution from Japan:

3.2 Technical sessions

- UWB Antennas and Applications
- Antenna Challenges Solved by Complex Modeling
- Future Perspective of Wireless Sensor Networks in Healthcare
- Time-Domain Techniques
- Slotted and Guided Wave Antennas
- Well-Conditioned Integral Equation Formulations
- EBG Theory and Designs
- Phased Array Antennas
- Plasmonic Metamaterials
- Nanoantennas
- Printed and Planar Antennas
- Inverse Scattering and Image Reconstruction
- MIMO Antennas for Mobile Devices
- Wireless Communications
- Pattern Reconfigurable Antennas
- Propagation in Tunnels
- Propagation in Indoor Environments
- Propagation Channel Modeling
- Matching Approaches for Small Antennas
- Advances in Antenna Impedance Matching
- Numerical Weather Prediction Supporting Electromagnetic Wave Propagation Modeling
- Time-Domain Methods
- Fast Integral Equation Solvers
- EBG in Antenna Engineering
- Metamaterials and Metasurfaces
- Nanoantennas and Plasmonic Structures
- Inverse Scattering and Imaging: Methodologies and Algorithms
- Antenna Systems for MIMO Communications
- Antenna Analysis and Propagation in Complex Media
- Frequency Reconfigurable Antennas

- Scattering, Diffraction, and RCS
- Satellite and Terrestrial Propagation
- Advanced Phased Array Antenna Systems and Applications
- Advances in Commercial Electromagnetic Simulation Tools
- EM Optimization Techniques and Applications
- Wideband Slot-Fed and Slot-Guided Antennas
- Discretization and Solution of Integral Equations
- Frequency Selective Surfaces
- Analysis and Design of Antenna Arrays
- Novel Effects in Metamaterials
- Handheld Device Antennas
- Microstrip Antennas and Printed Devices
- Inverse Scattering and Imaging: Techniques and Applications
- Performance and Novel Applications of Multiple Antenna Systems
- Reconfigurable Antenna Applications
- Radio Communication Components and Systems
- Hybrid Methods
- Fast Methods
- Fast Methods for Integral Equations
- Dosimetry and Exposure Assessment
- Radar Systems Azalea/Begonia
- Ultra-wideband Electromagnetics and Antennas
- Printed MIMO Antenna Implementations and Challenges
- Passive Intermodulation (PIM) and High Power Effects in Antennas and Wireless Interfaces
- Optimization of Antennas
- EM Measurements: Antennas and Imaging
- Domain Decomposition Methods
- Antennas Using EBG Structures
- Wideband Phased Arrays
- Transmission-Line Metamaterials
- Spectrum Allocation and Electromagnetic Interference
- Analysis and Design of Microstrip and Printed Antennas
- Slot Antennas
- Millimeter-wave Mobile Antennas
- Wireless Sensor Networks
- Tunable and Reconfigurable Multi-Frequency Antennas
- Low-Profile Wideband Antennas
- Metasurfaces for Wave Guidance and Radiation

- FDTD
- EM Measurements: Advanced Materials and Wireless Applications
- New Integral Equation Formulations
- Fabry-Perot Cavity Antennas
- Advanced RF Technology in Antenna Array Design
- Metamaterial Applications
- Small Antennas: Theory, Designs, and Realizations
- Microstrip and Planar Circuits
- Tomographic and Radar Imaging Systems and Techniques
- Wireless Power Transfer
- Beamforming and Array Signal Processing
- Remote Sensing Measurements
- Electromagnetic Imaging and Sensing Applications
- Microwave Imaging of the Breast
- Therapeutic electromagnetic-induced heating or stimulation of tissue
- Medical Sensing and Monitoring
- AMTA Special Session - Advances in RF Measurement Technology
- Remote and In-Situ Sensing of the Earth
- EndFire Broadband Antennas
- Terahertz Antenna Technologies
- Traveling Wave Antennas - In Honor of Prof. (Buck) Carlton H. Walter
- FDTD: Advanced Algorithms and Modeling Techniques
- EM and EMC Metrology
- Multilayer, Metamaterial-Inspired, and other Complex Antenna Topologies
- Reflector Antenna Analysis, Design and Implementation
- Metamaterial Applications
- Small Antennas for Applications
- Radar Imagery
- Software Control and Optimization of Reconfigurable Antennas
- Integral Equation Numerical Methods
- Scattering in Random and Complex Media
- Human Body Interactions with Antennas and Other Electromagnetic Devices
- Antennas for Biomedical Applications
- Vehicular Antennas
- High-frequency Methods for Antenna Analysis
- Remote Sensing Systems
- Wireless Power Transmission and Electromagnetic Interference
- Broadband Antennas and Systems

- RFID Sensors and Systems
- Advanced Technologies for Terahertz Applications
- Frequency-Domain Methods
- Antenna Theory, Design, and Measurements
- Numerical Methods
- Electromagnetic Properties of Materials
- Lens Antennas
- Metamaterial Structures and Devices
- Mobile and small antennas
- Microstrip Antenna Arrays
- Propagation and Remote Sensing in Complex and Random Media
- Antenna Near Field and Mutual Coupling
- Enabling Research for Smart and Adaptive Antenna Systems
- Dielectric Resonator Antennas with Circular and Dual Polarizations
- Theoretical Electromagnetics
- Guided Wave Structures and FSS windows
- Wireless Propagation in Vehicular Environments
- Dielectric Resonator Antennas Enhanced Characteristics using Optimization and Material Combinations
- Advances in RFID Sensing: An Emerging Wireless Identification and Sensing Technology
- Novel Transmission-Line Structures, Electronic and Photonic Devices
- Antenna Theory, Design, and Measurements II Iris/Hibiscus
- Advanced Numerical Methods
- Reflectarray/Transmitarray Analysis, Design and Optimization
- Antenna Miniaturization
- Propagation Modeling and Measurements
- Antenna Performance Improvement using Materials, Devices, and Techniques
- Metamaterial Theory and Applications
- Antenna Near-Field
- Pattern and Scanning Reconfigurable Antennas
- Antenna Feeds and Matching
- Electromagnetics Education
- Materials and Measured Effects
- Propagation, Scattering, and Absorption in Metamaterials
- Antenna Concepts
- Diversity Antennas and MIMO Systems
- Wideband, Multiband, and Circular-Polarized Microstrip Antennas
- RFID Antennas in Difficult Environments

- Antenna Theory
- Applications of Numerical Methods
- Antenna Design and Measurements
- Metasurfaces and Arrays
- Propagation in Random or Complex Media
- Electromagnetic Interaction and Coupling
- Structures Leveraging Novel Material Properties
- Reflectarray Antenna Elements
- Low Profile and Electrically Small Antennas
- Nanoelectromagnetic Analysis
- Finite Element Domain Decomposition Methods
- Polarization Reconfigurable Antennas
- Finite Difference and Finite Element Methods
- Numerical Analysis of Antennas and Materials
- Beam-Scanning Reflectarray/Transmitarray
- Antenna application of metamaterials
- Nanoelectromagnetic Design
- Advanced Frequency- and Time-Domain Finite Element Methods
- UWB Dielectric Resonator Antennas
- Multiband Antennas for Mobile Devices and Other Applications
- RFID Antennas
- Antenna Applications
- Electromagnetic Theory
- Design and Analysis of Novel Materials for Electromagnetics
- Metamaterial Structures
- Printed and Slot Arrays
- Microstrip and Low-Profile Antennas with Improved Performance
- Microstrip Antennas for Novel Applications
- Computational Issues in Electromagnetic Interference
- Theory of Diffraction and Physical Optics applications
- Metamaterial-Inspired Antennas
- High-frequency Scattering and Asymptotic Methods
- Dielectric Resonator Antennas for Optical and Millimeter-wave Applications
- Microwave and Sub-millimeter Measurements
- Parallel and Special-processor Based Numerical Methods
- Fast Computational Methods for Physical Optics and High-frequency Applications
- Transformation Electromagnetics
- Scattering and Diffraction
- Dielectric Resonator Antennas with New Characteristics, Materials, and Applications

4 PIERS 2013 in Stockholm

The 34th PIERS (Progress In Electromagnetics Research Symposium) in Stockholm, Sweden

PIERS provides an international forum for reporting progress and recent advances in all aspects of electromagnetics. Spectra range from statics to RF, microwave, photonics, and beyond. Topics include radiation, propagation, diffraction, scattering, guidance, resonance, power, energy and force issues, and all applications and modern developments.

4.1 Statistics

Date: August 12–15, 2013

Venue: Kista Massan Conference Center

Web page: <http://www.piers.org/>

Total submitted abstracts: 1650

Final accepted presentations: 1303 (910 oral talk + 393 posters)

Invited talks: 273

Keynote talks: 36

Tutorial talks: 5

Registered/Paid participants: 1135 from 67 countries.

Leading countries (in terms of participants): China:133, Sweden:93, Japan:87, USA:85, UK:68, Germany:58, France:55, Russia:48, Spain:45, Taiwan:43, Italy:40, Korea:39

4.2 Technical sessions

- Metamaterials and Plasmonics Based on Graphene
- New Developments in Non-reciprocal Electromagnetics and Optics
- Frontiers of Ultrafast Optics
- Foundations of Casimir Physics (with tutorials)
- Silicon Photonics
- Antenna Modeling and Simulation
- Advanced Photonic Materials and Nanophotonics
- SC5: Inverse Scattering Problems: Theory and Applications
- SC1: Novel Mathematical Methods in Electromagnetics
- Electromagnetics of Gradient Nanostructures and Heterogeneous Media
- Application of EM Field in Medicine and in Ecological Industrial Technologies
- SC1: Physics and Application of Nonlinear Materials and Devices
- Plasmonics in the Quantum Regime 1
- Metasurfaces for Wavefront Control
- Casimir Effect and Heat Transfer 1
- Novel Frequency Selective Structures
- Innovative Materials/Metamaterials for Wireless Circuits and Miniaturized Antennas
- Advances in Millimeter-Wave and THz Circuit, Techniques and Applications
- Multiband and Wideband Antenna and Array Techniques
- Optical Fiber Communications
- Industrial Forum on CEM (Computational Electromagnetics) Software

- Fano Resonances in Microwaves and Optics: Physics and Application
- Ultrawideband Nondiffracting and Accelerating Waves
- Remote Sensing of the Atmosphere, Ocean, Hydrology and Cryosphere
- Nonlinear and Inverse Problems in Electromagnetics
- Computational Electromagnetics
- Transformation Optics 1
- Recent Progress in Photonic Crystals 1
- Education for Electromagnetics
- Microwave Remote Sensing of Snow Cover
- Lightwaves and Resonances in Confined Structures
- Small and Miniaturized Antenna Techniques
- Nonlinear Optics: Structured Materials, Functional Devices and Applications 1
- Analytical and Numerical Techniques for Periodic Structures
- Paper-based Microwave Circuits and Antennas
- Circuit Modelling in Microwave Devices
- Antenna-channel Interactions and Multipath Wireless Channels
- Spectral Theory of Open Structures: Critical and Interaction Phenomena
- Recent Progress in Photonic Crystals 2
- Quantum Bits and Entanglement at Microwave Frequencies
- Optics for Bio-medical Diagnostics and Therapy Applications
- Casimir Effect and Heat Transfer 2
- High Energy and High Power Applications in Photonic Crystal/Microstructured Fibres
- Optical Angular Momentum and Its Applications
- Antenna and RF Measurements
- Integrated Nanophotonics for Optical Interconnects in Data Centers
- High Frequency/Asymptotic Methods
- Inverse Source Problems for Localization and Diagnostics
- Emerging Techniques and Applications in SAR/ISAR Imaging
- Extended/Unconventional Electromagnetic Theory, EHD(Electro-hydrodynamics)/EMHD(Electro-magneto-hydrodynamics), and Electro-biology
- Advanced Mathematical and Computational Methods in Electromagnetic Theory and Their Applications
- Computational Techniques in Electromagnetics and Applications
- Microwave Metamaterials and Applications 1
- Super Enhancement of Light with Plasmonic Nano-structures 1
- Photonics of Quantum Dots and Its Applications
- EMC, Signal Integrity and Power Integrity for Semiconductor and High Speed Electronics
- Microwave Photonics

- Challenges for Small Antennas
- Ultra-wideband Antennas for Radio Astronomy
- Body-centric Wireless Communications
- GPU Computing in Electromagnetics
- Design and Simulation of Electromagnetic and Optical Devices
- On-chip Optical Sensing Technologies and Devices
- Action-at-a-distance Theories and Electrodynamics
- Super Enhancement of Light with Plasmonic Nano-structures 2
- Multi-scale & Multi-physics Computational Electromagnetics
- Super-resolution in Bio-imaging and Sensing
- Plasmonics in the Quantum Regime 2
- Radio over Fiber Systems and Components
- Plasmonic Nanomaterials and Nanostructures for Photovoltaics and Optoelectronics in Energy 1
- Effective Medium Theories and Homogenization
- Active Antennas, MIMO and Beamforming Systems
- Intentional Electromagnetic Interference (IEMI) and EMC
- THz Technologies and Applications
- Advanced Magnetic Materials for Microwave Applications
- New Materials for EM Shielding Materials and Technology
- Giant Magneto-impedance and EM Safety
- Advanced Techniques in Nanoelectromagnetics Applications
- Transformation Optics 2
- Photonics and Optoelectronics in Industry
- Non-linear Metamaterials and Plasmonics
- Progress in Optical Sensing and Environmental Monitoring
- Wireless Energy Transmission and Harvesting 1
- High Resolution Imaging with Penetrating Radar Scanners for Detection of Small or Low Contrast Objects
- Physics and Modeling of Laser-induced Periodic Surface Structures
- Millimeter-Wave and THz Components, Antennas and Arrays
- Integrated Optical Passive and Active Components for Communication and Sensing Applications
- Remote Sensing of the Earth, Ocean, and Atmosphere
- Advances in EM Imaging and Detection of Concealed Objects or People through Walls
- Microwave Metamaterials and Applications 2
- New and Novel Concepts on Metamaterials/Plasmonics
- Plasmonic Nanomaterials and Nanostructures for Photovoltaics and Optoelectronics in Energy 2
- Plasmonics beyond the Common Local-response Approximation
- Wireless Energy Transmission and Harvesting 2

- Antenna and Array
- Electromagnetic Modeling, Inversion and Applications
- MIMO Antennas
- Microwave and Millimeter Wave Circuits and Devices, CAD
- Medical Electromagnetics, Biological Effects
- Nonlinear Optics: Structured Materials, Functional Devices and Applications 2

5 ICEAA 13, IEEE APWC 13, and EMS 13

2013 International Conference on Electromagnetics in Advanced Applications (ICEAA 13), 2013 IEEE-APS Topical Conference on Antennas and Propagation in Wireless Communications (IEEE APWC 13), and 2013 Electromagnetic Metrology Symposium (EMS 13)

These Conferences together have a wide scope, which includes all kinds of advanced applications in Electromagnetics and new technology developments. Broad areas are covered, ranging from Cognitive Radio to Electromagnetic Compatibility and Intentional Electromagnetic Interference, from Antennas, Propagation, and Components Technologies to Radar Cross Section and Asymptotic Techniques, from Electromagnetic Applications to Biomedicine to Computational Electromagnetics, from Wireless Communications to Metamaterials and Nano-magnetism. The three conferences altogether feature 50 sessions including twenty-nine special sessions organized by renowned experts. The ICEAA 2013 Conference program consists of 31 sessions including 23 Special Sessions; the IEEE APWC 2013 Conference program consists of 11 sessions including three Special Sessions; furthermore, there are 7 joint EMS-ICEAA sessions (two of which are Special Sessions) and one joint ICEAA - IEEE APWC - EMS Special Session.

5.1 Statistics

Date: September 9-13, 2013

Venue: Torino Incontra

Web page: <http://www.iceaa.net>

- Number of paper submission: 667

- Number of presentations: 420

5.2 Technical sessions

- Inverse Scattering and Remote Sensing
- RFID Technologies
- Optoelectronics and Technologies for sub-mm Waves
- Electromagnetic Applications in Biomedicine
- Active Antennas
- Electromagnetic Theory
- Nonlinear and UWB Processes in High-Power Electromagnetics
- Advances in Challenging Problems of Mathematical and Computational Electromagnetics: Focus on the Applications
- Recent Advances in Challenging Problems of Mathematical and Computational Electromagnetics
- Analytical, Numerical and Hybrid Methods in Electromagnetics
- Antennas and Arrays

- Propagation and Network Planning, Channel Modeling and Human Exposure: Measurements and Modeling for Future Networks
- Wireless Networks and Security
- Time Domain Methods
- Satellite Communications Antennas, Propagation, and Payloads
- EM Technologies for Astrophysics
- Channel Modeling
- Communication Systems
- Antennas
- EM Field Metrology
- Electromagnetic Measurements
- Mathematical Advances in Electromagnetics
- Metamaterials, Nanotechnology, and Complex Media
- Electromagnetic Properties of Carbon Nanostructures
- Numerical Methods in Electromagnetics
- Numerical Methods Electromagnetics
- Radio Astronomy
- Simulation Technologies in Computer -Aided Engineering: What's Next?
- Microwave and Multimodal Imaging Techniques in Medical Applications
- Bioeffects and Medical Applications
- Electromagnetics for Healthcare and Medical Applications
- Wideband Antennas
- Plasma, Random and Nonlinear Electromagnetics
- Remote Sensing
- Fields and Waves
- Fast Computational Methods
- Multi-based, Wide-band, and Emerging Antenna Technologies
- Timed Arrays
- URSI Italy Special Session
- Effects of EM Pulses on Electronic Systems
- Finite Methods
- Antennas and Electromagnetic Devices Inspired by Electromagnetic Band Gap
- Fast Integral Equation Solvers and Stable Discretizations
- Network Methods in EM Modeling
- Stochastic Electromagnetic Fields
- Electromagnetic Modeling for EMC
- Advances in Wave Physics Modeling and Inverse Problems
- Propagation

- EMC/EMI/EMP
- Mobile Devices and Smart Antennas
- Electromagnetic Modeling of Devices and Circuits
- Advances in Physical Layer Wireless Communications

6 ISAP2013

The 2013 International Symposium on Antennas and Propagation

This is one of three major international conferences in the fields of Antennas and Propagation in the world.

6.1 Statistics

Date: October 22 - 25, 2013.

Venue: Jiangning Exhibition Center, Nanjing, China

Web page: <http://www.emfield.org/isap2013/>

- Totally 420 (inclusive 41 invited papers and 3 keynote talks) submissions are received
- 359 papers (inclusive 41 invited papers and 3 keynote talks) were accepted
- Total registration number: 356
- Total participants: 368

6.2 Technical sessions

- Adv Ant for Radio Astr. 1
- New Strategies of CEM 1
- UWB Antennas
- Compact Antennas
- Adv Ant for Radio Astr. 2
- New Strategies of CEM 2
- Broadband Antennas
- Small Antennas
- EurAAP/COST
- Computational EM
- WLAN Antennas
- Measurements
- Wireless Power Transmis.
- EM Scattering
- Patch Antennas
- Radio Propagation
- Body central Antennas
- SIW Antennas & Devices
- Reflector & Air fed Array
- Mobile & Indoor Propag.

- Body central Propagation
- Integrated MMW Antennas
- Array for Radar Systems
- Wire Antennas
- A & P for Mobile Comm.
- MMW & THz Antennas
- Ant. Analysis & Synthesis
- EM in Circuits 1
- A & P for MIMO Comm.
- MMW Antennas
- Freq. Selective Surface
- EM in Circuits 2
- Antennas for RFID
- Inversed Scattering
- Slot Antennas
- A & P in Meta structures

7 APMC 2013

The 2013 Asia-Pacific Microwave Conference

The APMC 2013 offered opportunities to share the most up-to-date scientific discoveries and innovative products. The ultimate objective is to advance our field of microwave through networking among academia, industries, and all affiliated specialists and building mutual understanding among colleagues from all over the world. The scientific programs provided all participants with opportunities to exchange the latest information, ideas, and experiences on microwave fields. Invaluable instructional lectures, workshops, and short course statements were offered from the outstanding microwave experts.

7.1 Statistics

Date: Nov. 5–8, 2013

Venue: Coex, Seoul, Korea

Web Page: <http://www.apmc2013.org>

7.2 Technical sessions

- Sensors and Packaging
- Passive Components
- Advanced Metamaterial Technologies
- MIMO Antennas
- Microwave Imaging and SAR Remote Sensing
- Wireless Power Transfer and Energy Harvesting
- Active Components & EM Field and Techniques

- Novel RF Transceivers
- Transitions and Packaging
- Theoretical Analysis
- Broadband and Multiband Antennas
- System Applications
- Microstrip Antennas and Array
- Frequency Conversion Circuits
- Tunable Components
- Special Session on EUMA
- Broadband and Multiband Antennas
- mm-wave Circuits and Systems
- RFID
- Low Noise Amplifiers
- Balun, Coupler and Combiners
- Computational Electromagnetics
- Millimeter-Wave Antennas
- Novel Oscillators
- Metamaterials Novel EM Structures
- Passive Components & Systems and Applications
- Sub-mm-wave and mm-wave Integrated Circuits
- Balun, Coupler and Combiners
- Biomedical Applications
- Mobile and Indoor Propagation
- Lumped and Transmission Elements
- Printed Antennas
- Power Amplifiers
- Waveguide Filters
- Wireless Power Transfer and Applications
- Antennas for Vehicle, Satellite, Military Applications
- Band Pass Filters
- Digital RF
- Sub-mm- wave and Terahertz Technologies
- Multi-Mode Band-Pass Filters
- Microwave Sensing
- Antennas for Vehicle, Satellite, Military Applications
- Radar Systems and Applications
- EM Analysis
- Poster Session : Antennas and Propagation & Emerging Technologies

- High Power Devices and Amplifiers
- Band-Stop Filters and Diplexers
- RF Measurement Techniques
- MIMO and Handset Antennas
- Future Wireless Communications and Radars
- Beam Steering Applications

8 Future Conferences

8.1 iWAT 2014

2014 International Workshop on Antenna Technology

Date: March 4–6, 2014

Venue: the Four Points by Sheraton Sydney, Darling Harbour, Sydney, Australia

Web Page: <http://www.iwat2014.org/index.php>

8.2 EuCAP 2014

The 8th European Conference on Antennas and Propagation

Date: April 6–11, 2014

Venue: World Forum in The Hague, The Netherlands

Web Page: <http://www.eucap2014.org/>

8.3 IEEE APS 2014 and USNC-URSI 2014

The 2014 IEEE International Symposium on Antennas and Propagation and USNC-URSI National Radio Science Meeting

Date: July 6–12, 2014

Venue: Memphis, Tennessee, USA.

Web page: <http://www.2014apsursi.org/>

8.4 ICEAA and IEEE APWC 2014

The 2104 International Conference on Electromagnetics in Advanced Applications, and IEEE–APS Topical Conference on Antennas and Propagation in Wireless Communications

Date: August 3–9, 2014

Venue: Palm Beach, Aruba.

Web page: <http://www.iceaa-offshore.org>

8.5 URSI GASS 2014

31th URSI General Assembly and Scientific Symposium

Date: August 16–23, 2014

Venue: Beijing Conference Center, Beijing, China

Web page: <http://chinaurisirigass.com>

8.6 35th PIERS in Guangzhou

The 35th PIERS 2013 in Guangzhou, China

Date: August 25–28, 2014

Venue: TBD

Web page: <http://www.piers.org/>

8.7 APMC 2014

The 2014 Asia-Pacific Microwave Conference

Date: Nov. 4–7, 2014

Venue: Sendai International Center, Sendai, Japan

Web Page: <http://www.apmc2014.org>